made on she first Portions of some Analyses, in which, tho'  
immediately after the Distillation *ί* had only perceived the-  
Marks of Volatile Salts, 'and no Sign of Acids, aster they had  
been kept a sufficient Time, I could no longer perceive the  
Marks of volatile Salt, but only os Acids. The Reason of this,  
in my Opinion, was, that these Acids, tho' considerable enough.  
for Quantity in the Parcel of Liquor, were yet in a manner,  
inveloped by the oily Particles, that in this State they could  
neither shew themselves, nor cause the Volatile Salts to disap-,  
pear by mixing with them. But when Fermentation has had.  
Time to disengage the AcidS from a certain Quantity of oily  
Particles, winch in this as well as in the preceding Observation  
are commonly precipitated to the Bottom of the Liquor under  
the Form of a Mass os a greater or a less Thickness, these  
Acids heing more free, and more developed, will not sail in  
that Condition to obliterate the Marks of the volatile Salt in  
**the** Liquor, by uniting itself to that Salt ; and as the Quantity  
**Of** Acids surpasses that of Volatile Salts, the Overplus of. those  
Acids, winch, not heing combined with Volatile halts; remains  
In this State of Developement, must under the Operation give  
«Vident Tokens of Acidity, which the Mixture os oily Particles  
hinder'd it from shewing hefore. .....

- To conclude, I made one Observation more upon the  
firstPortions *os some* Analyses os Plants, which was, that  
though neither the AcidS nor the Volatile Salts were per-  
ceptible in the Operation, they yet excited an acrimonious  
and pungent Savour upon the Tongue, which left no room  
to doubt but that these Portions contained a considerable  
Quantity of Salt. It appearing therefore by these Experi-  
ments, that this Salt was neither an Acid developed, nor  
an alcaline Volatile Salt, it can he no other than a complete  
Sal Ammoniac ; that is, it has undergone no such thing as a  
Decomposition by Analysis, hut contains in itself the Acids and  
Volatile Salts as intimately united together aS they were in the  
.Plant itself*: For we* cannot say, that this Salt was compounded  
of AcidS, and a fixed Matrix, because this Matrix was hinder'd  
from fifing with it, at least entire, in the Distillation, especially  
In. the first Portions of the Analysis, where but a moderate  
Fine is used. There can be none then but a Sal Ammoniac  
that can rise in the Case hefore us, which consequently is the  
true Cause of that acrimonious and pungent Savour in .the first  
Portions. It is true, and we have already observ'd it, that  
: common Sal Ammoniac will in time dye a reddish Brown with  
.Turnsole, winch I never perceived in the Sai Ammoniac of our .  
first Portions ; but the oily Particles, which are always mix’d

. with the Salts of distill'd Portions, might on that occasion  
hinder the Sal Ammoniac from exciting that reddish-brown  
Colour, and so much the rather, because it does not excite

. this Colour hut after a good deal of Time and Pains, even  
when it is in its natural State, that is, when it is free and  
disengaged from every oily Substance. *Memoires deVAcad.  
Roy. des Sciena. lylQ.*

It appears by the Observations already made, upon the Ana-  
lyses of animal and vegetable Substances, and particularly from  
the Alterations, of which several Parts os analysed Plants are  
- susceptible, that the Volatile Salts, scattered in the different Por-  
tions of analysed Plants, may absorb, and keep conceal'd, those  
. Acids winch did not belong to them in the compound Body,  
- as well as thofe which were naturally united to them before  
the Analyses, and which have risen along with them in Distilla-  
tion. It appears also, that the Observation with respect to AcidS,  
. winch on certain Occasions subsist together with Volatile Salts,  
. without heing join'd to them, does not prove, that there are  
not other more disentangled Acids, which may sometimes be  
join’d to them ; and that the less, hecause I have shewn that  
. these Very Acids, which had not as yet contracted an Union  
with these Salts, did not sail to do *so* afterwards, when they  
had arrived at the same Degree of Freedom and Disengagement.  
It moreover follows from what has heen said, that independ-  
ently of Volatile Salts, which Very often are not sound in seve-

. ral Portions of distilled Liquors, a great many Acids may be  
sheathed up in the said Liquors by simple oily Particles: Con-  
frequently, if no Acids appear, or an inconsiderable Quantity  
of them, in certain Portions of analysed Substances, which are  
impregnated with volatile Salts, or oily Substances, we heve  
not from thence a Right to conclude, either that such Portions  
contain no Acids at all, or that they contain none but such

- as appear. We should often fall into palpable Mistakes, if, in  
computing the Degrees of Acidity in a Plant, we should take  
our Estimate from those Acids discovered by the Analysis of that  
Plant; for Instance, the Leaves of Sorrel yield a very sour  
Juice, in which, if one was to judge by the Taste alone, .he  
would conclude there was a great Quantity of Acid: Besides,  
when the essential Salt is drawn from that Juice, its Crystals  
are sour, and resemble Cream of Tartar, in a word, every  
Circumstance declares, that this Plant yields Acids, and that  
in the different Portions of Liquor, raised by the Distillation of  
is. Acids will always be particularly discovered; yet as Sorrel  
also yields a great deal of volatile Salts, which diffusing them-

selves almost every-where, as I shall afterwards shew, cover  
and sheath up at least a large Share of the Acids, with which :  
they ascend, if one was to over-look this Circumstance of the--  
Salts, and allow one's seif only to be guided by Appearances,-  
we might possibly be induced to think in examining the differ-7ent distill'd Portionsof several Sorts of Sorrel analysed at differ-’1ent times, and at- different Ages, -that this Species of Plant  
Contained .sewer AcidS, or yielded less of them in Distillation,  
than other Plants, winch in reality contain a great deal less, and  
in Distillation yield a smaller Quantity, but in inch a' manners  
that each Acid at that time finds nothing in the distill’d Liquor,-  
which can hinder it from appearing what It really is : And what,'  
in my Opinion,.plainly proves that according, as the volatile  
Salts of the. Sorrel are more or less diffusedgnind distributed,  
with the Acids in the different Portions'of the”'Analysis, sis  
the sewer or more Marks Of an Acid this Planttimst afford ;  
what, I say, in my Opinion,, proves this, is 'a' Reflection upon  
the. two following Experiments, an Account of which will not  
perhaps he disagreeable.. When we analyse the Leaves, of SorTeI  
byaneans.os a Retort, and a oothinon Fire augmented by-De-τ  
grees, aster the first Portioris areidrawn.away, The distilpd Li-  
quor ordinarily has the Maris of Volatile Salts, wltidirife at first;  
which Continue to do *so afterwards,, and* which' 'towards the  
Close *of* the Distillation chine in still *greater* Abundance, either  
under in liquid or a dry Form. As for the'Acids, the first  
Portions of the distill'd Liquor have no Marks, of them.’ The  
succeeding Portions have also Very often but. frinr Marks of  
them, and, after they are.kept*for* some time, none at all, and  
that for -the Reasons already assign'd. But if instead of a com-  
mon Fire we Use a Bath-heat Tor the Distillation Of **the**Leaves or. Juice of Sorrel, \* the gentle Heat inf it, sufficient  
for the first Volatile Salts which have been mentioned, that is,  
for those which rise first, and with most Ease, but insufficient  
to disengage, and raise, at least to any considerable Degree,  
the Acids of the Plant, will by. that Very means lay a Foundat  
tion for' both to rise at different times ; for by still carrying  
on the Distillation with , a stronger Fine, the Liquor which  
will next shoceed, and contains fewer Volatile Salts, hecaususa  
great Quantity, of them have already been.raised in the first  
Portion of the Dishllation will give more considerable Marks of  
Acidity, than if the Analysis of the same Plant -had been car-  
ry'd on in the ordinary manner. ... . .. . - .

The other Experiment is this: Is instead of analysing-fresh  
Sorrel-leaves, we hegin by allowing them to macerate for a  
considerable time, so that the Fermentation; which is often a  
sort of, or Beginning of, the Analysis, may have laid a Foundation  
Tor the Disengagement and Evaporation of a certain Number  
os Volatile Salts; and if after this natural Operation we proceed  
to dish! the Leaves of Sorrel, whilst they are in inis State, in  
the ordinary manner ; and if we compare this Analysis with  
that of the same fresh Sorrel which has suffer'd mo Maceration,  
we must acknowledge, that the macerated Sorrel affords, both in  
the Beginning and whole Course os the Analysis, not only a great  
many more Marks ofAcidS than the other, but that it also affords  
fewer Marks of- Volatile Salts, and that only towards the last  
Portions; whereas without Maceration it would have yielded  
Volatile Salts from the Very first, as I heve already observed.  
In a Word, these two Analyses of the same Plant resemble  
one another so littie, that one would readily take them for the  
Analyses of two different Plants, which may indeed differ less  
from each other, than these different Analyses of the fame  
Plant. We have still a great many more Plants naturally  
loaded with Sal Ammoniac, the Fermentation of which causes  
a great Quantity of Volatile Salts to exhale, and by that means  
lays a Foundation for a great deal of the AcidS of the Plants  
to he discover'd in the Analysis. This Fermentation also  
often is the Cause that a particular Plant analysed, gives some  
Marks of AcidS, which without this Assistance would have  
afforded none, as I shall shew in another Place, where an addi-  
tional Proof inay be found, that there are a great many Acids  
so well wrapt up by the great Number of Volatile Salts, which  
have ascended with them in the Distillation of the Plant, that  
one could not have suspected them to he lodged in the same  
Place without that Train of Reflections which naturally give  
Rise to the Experiments and Observations to he made in them  
proper Place. . .

The Cafe is not the same with the Juice of Lemon, as  
with that of Sorrel ; for though they be both Very sour, yet  
that of the Lemon differs from the other, as it affords very  
few Marks of a Volatile Salt ;'from which Circumstance two  
Very considerable Differences result, in the Analysis of each of  
the Juices. The first is, that, in the Lemon Juice, the Acids,  
rising alone, and without any Mixture capable of absorbing  
. them, are infinitely better discovered, and, appearing from the  
Very first Portion, continue to augment to the Very last.. Where-  
as Sorrel, when analysed, ordinarily gives no Marks of AcidS,  
or Very saint ones , but, in Recompence, it is richly impreg-  
nated with Volatile Salts. The other Difference is this, that  
tho' the Lemon Juice has heen left in Maceration for a const-

derabie time, yet the Adds, afterwards drawn from it by Distil-  
lation, do not, upon that Account,, appear either more disen-  
tangled, or in greater Abundance, than those which come from  
-it-before it is subjected to Maceration ; which is quite the Re-  
**verse of ,** what we have observed in the Analysis of fermented  
.florrel., This may he very well accounted for, from whet has  
.been,said; for is it is true, that the Fermentation, preceding the  
Analysis of the Sorrel Juice, does not lay a Foundation for a  
greater.Number of Acids appearing, but because it dissipates a  
.great deal of the volatile Salts, which would have covered and  
sheathed up a good Part of these Acids; this Fermentation, I  
lay, which is necessity for discovering the Acids of the Sorrel,  
.is ofnoEstecl for discovering those of the Lemon ; which not  
.being-in the fame State with thofe.of the Sorrel,, in point os. the  
.volatile Salts, and which rising naturally in Distillation, without  
'being accompanied with volatile Salts, -have r no Need, like the  
Acids.of Sorrel, of.theAsiistanhe osFermentatlon, to give an-  
-other Direction to these. Salts, and turn..;their Effecti another  
:way. - Hence we see, that the Ahalysisof Lemon Juice newly  
.«waded, and of than- which has been macerated, should, not  
‘semibly differ from each other, with regard to the Disentangle-  
..ment and Quantity of the Acids, which.tate yielded bythelo  
..respective'Juices ; and,: consequently, whatI have observed on  
the different Analyses of the Jnices of Sorrel and Lemon, should  
. naturally heppen in the-same manner, accjrding ro niyEeason-  
s ing, which, in forne measure, justihesjtd; in ri’.-I  
; Moreover, in examining a^eatNumper of.iylante, naturally  
.loaded with a great deal of .essential Saltioaod wiinth was such,  
-that itsAcid, or at leastATart of its Acid, migni easily he .dip  
.engaged from its Matrix, during therDistiherion, of.the Phint,  
/and discover itself in the different Portiorisof the Analysis; pror  
-Tided it shads noshing there to hinder it, st appeared to me, that  
**. we** mightproperlyenough reduceto fourClassesall the Differences  
observable in the Analyses of Plants, with regard to their Acids,  
**. and** their volatile Salts, whiosi do not always appear disseminated  
**and** scattered, in the same manner, in the different Portions of  
eachAnalysis; and which, in.every Species of Distribution, have  
.appeared, to me, to preserve, a certain Order. . ’Tis principally

from the Analyses which the late Mr. *Bourdelin* has made, that  
**. I** have drawh the following Observations. " r.

**I** make the first Ciass to consist of those Plants, which, in the  
Analysis, do not ordinarily give Marks of a. volatile Salt, or at  
least give., but very faint and languid ones, which may pass for  
nothing ; fucti are Rennetsand Calvillo Apples, dry Martio-  
pears, and Frankreal-pears, *etc.* In these /kinds of Plants the  
Acid appears fensibly, from the first Portion of the Analysis,  
and continues to appear all along, more and more, to the very  
**End,** when it still abounds more, and is hetter discover’d,  
because it has nothing to hinder it from so doing..

The second Ciass consists of such Plants as give more or less  
Volatile Salts, but do not yield them Dll towards the End of the  
Operation. In this sort of Plants, the Acid generally discovers  
itself from the Beginning of the Analysis, and continues to do  
so still more and more, till it arrives at that Portion in which  
the volatile Salt begins to rife: and then the Acid either appears  
Do more at all, ifthe volatile Salt is in great Quantity, or appears  
always much less then nt would heve done without the Com-  
pany of the volatile Salt..- It even often happens, that we dis-  
cover Marks of a volatile Salt, and an Acid, in one or two  
Portions which come before the last: Arid sot the last Por-  
tion itself, which is far more richly impregnated with vola-  
\_ tile Salts than the other two, and which boils and ferments  
very strongly, as soon as the least Acid is poured into it, it  
so well conceais the Acids it has received from the Plant, that  
they cannot be perceived, tho’, from otheuCircumstances, we  
have strong Proofs that it really contains more of them than any  
**of the** preceding Portions. We find Examples of this second  
Class, in the Analyses of the white Leaves of the Wild and  
Garden Succory, of Periwinkle, of Chervil beginning to flower.  
Of Celery, of Roman Lettice, of Fumitory become bard, and  
beginning to bear Flowers and Sced, of Peruvian hark infused  
**in** Water, of Gentian-roots, of Polypody, of Tutneps, os  
Rampions, of Dwarf Sun-flower, of Liquorice, of Violet-  
flowers, of Colts-foot, of Elder, of Peaches, of Roses, of Ar-  
tichoke Bottoms, of Melons, of Cucumbers, of Chestnuts, of  
Apricocks, of red Goose-berries, *of fresh,* but ripe Elder-berries,  
**Of** unripe Grapes, of Buckthorn, and many others.

The third Ciass does not differ from the second, but in thisithet the volatile Sale which, in the former, did not disoover itself  
till towards the End of tho Operation, discovers itself in the  
Beginning in this. As sot the Acid, it often appears from the  
first Portion, notwithstanding the Mixture of the volatile Salt,  
and often it cannot be discovered at that time ; but in the re-  
maining Course of the Analysis it is found alone, or, at least,  
we observe nothing along with it 5 and that even to the End of  
the Process, when the volatile Salt begins again to appear, and  
produce the same Effects, attended with the fame Circumstances  
as in the former Class, If any one desires Examples of this third  
Class, he needs only consult the ordinary Analysis of white Suc-

cory, of Carduus Benedictus,-of the red tiotat ofSpinriage, *of*young Onions,-of Sage, of Parsicy-leaves, of the Flowers of  
Lilly of the Valley, .of Cherries, of Heart-cherries, and several  
*others.* - f

The fourth Class differs from the preceding, not only because  
the Plants, which are comprehended under it, yield, of Distilla-  
tion, much more volatile Salt than those comprehended under  
the other Classes ; but also, hecause that Salt is more diffused  
through the succeeding different Portions of each Analysis, of  
which there are few in which it does not discover itself; and of  
which there is not, .sot the most part,- one which is nor very  
.much impregnated with volatile Salt, or which does not give  
. evident Marks of is. As foe the Acid, it shews itself, more on  
jest, in every Portion; of the Analysis, in Proportion to the  
, Quantity of volatile Salt with which it is lodged. For Instance,  
.tho\* the Analysis of Wheat, of Rice, of Barley, and of Oats,  
yield, almost in all their distill’d portions, .Marks.of a volatile  
’ Salt, yet the Acid does not fall to. appear 'also,- -and even often  
- contiones rd shew itself, from the first Portion to the End of the  
Process;: at which time, tile volatileherr abounds so much, that  
.It intirely sheaths -up the; Acid- which ns in them.' Borrage, on  
.the other hand; and . Bugloss, which,, from the : Beginning of  
.their Arialysis, give strong-Proofs of a volatile Salt, do nor dll-  
.cover their Acid till towards the Middle of the Operation; thet  
-is, about the middle Portions of the Analysis, when the volatile  
- Salt begins to abound less: It sometimes happens, thet in one,  
or, at most, two of these Portions,, the Acid appears alone.; but  
if.it appears afterwards, ’tis always accompanied with a volatile  
Salt, and that to the very Portion which comes last, or last bnt  
one, in which *the* volatile Salt.is found in groat Abundance, and  
makes the Acid entirely disappear. Some other Plants which  
still yield, in Distillation, more volatile Salts than Borrage and  
Bugloss, give, for the same Reason, much sewer Marks of Acids  
than those Plants;do, as may be seen by the Analysis of the  
Leaves and Stalks of white Garden Oractie, when it is young,  
and only sour or five Inches high. This may be likewise seen  
in the Analysis os Radish, of Hops thet are young, tender, and  
only five or six Inches high, of the speckled Nettio; of Pelli-  
tory of the Wall, of Colly-flowers, of the Stalks οτArtichokes,  
of Gourd-feeds, and. several others. .. . .

However, ’tis m vain to examine, with all imaginable Care,  
all the Portions of the Analysis of certain Plains, which, to  
speak, the Truth, .have, to me, appeared very sewin Number .  
and which, containing naturally more Sal Ammoniac than there  
preceding, yield also, in Distillation, more volatile Salts, since  
. we find that they discover no Marks of an Acid; and if we did  
notknow, that these Portions of distill’d Liquor were the Produch  
.of a vegetable Substance, and were to reflect only on the prodi-  
gious Quantity of volatile Salt which they contain, and their :  
entire Privation of Adds, we should make no manner of Doubt,  
but they belonged to some animal Substance. The Plants I have  
in View are Mushrooms ; Garden Purslane, very tender, and  
about two Inches high ; the Stalks and Leaves of Fumitory thet  
is young, tender, beginning to flower, and about ten or twelve  
Inches high. Yet tho’ these Plants do not, in their Analysis,  
discover any Acid, we have proved, thet no one has a Right,  
from that Circumstance, to conolude that they contain none -  
since the volatile Salt, which is found in great Quantity, in the  
different Portions of the Analysis, may cause the Acid contain’d  
in them to disappear. And, without having recourse, at pre-  
sent, to the strong Reasons which will he alledged in their pro-  
. per Pisces, and by which we shall fee plainly, that there is nei-  
ther Plant nor Animal, from which the ordinary Anolysis does  
not make an Acid rife, and sometimes in very great Quantities,  
tho’ there afterwards appears to he very little, or none at all,  
in the distilled Portions, we may convince ourselves of this  
Truth, by considering whet happens in Fumitory, Pellltory,  
; and Mushrooms, when allowed to ferment hefore they are  
analyfed; for when the Fermentation has had time to detach,  
from the Sal Ammoniac of these Plants, a certain Quantity of  
volatile Salts, and keep them from being subje&ed to the Ana-  
lysis which is to succeed the Maceration, this Analysis does nor  
. then fail to give Marks of. Acids, which, indeed, are faint and  
languid; but which, at the sems time, it would never have  
.given, if it had been allowed to have all the Store of volatile  
. Salts, which it must have naturally had, without the Macera-  
. tion. There is also an Observation upon Lettice, which, in  
my Opinion, deserves our Consideration, since it has a very neat  
Relation to theSubjeol in hand.

- The Analysis of. this Plant, like the Analysis of many  
.others, varies in Proportion to the Age, and different Parts of  
the Plant: For Instance, its Root and Stalk yield much lefs  
volatile Salt, and give much stronger Marks of Acids than the  
. Leaves; and the younger the Lettice is, the more volatile Salt  
it yields, and the sewer Marks of Acids it affords in Distillation;  
so that we find a very considerable Difference betwixt the Ana-  
lysis of small young Letuce, and that of the very same Lettice  
. when full grown and flowering; yet as this Piant, in all its dif-  
ferent States, never falls to yield a great Quantity of volatile

.halt; the Quantity of that Sait lays a Foundation for our think-  
ing, that the Analysis of Lettice allows fewer Acids to appear  
than it really Contains ; that is, fewer are actually raised in  
its Distillation. This may he sufficiently proved by the follow-  
Ing Observation upon the Leaves of Lettice, in two different  
States; in which, when analysed in the ordinary manner, they  
yield the strongest Marks of a Volatile Salt, and the least Signs of  
Acids. First, when the Plant is very small, and ready to he  
transplanted in Ranks, in order to be made to Cabbage r Second-  
Iy, when it is just cabbaged; tender, and in its best State for  
Balled. This Plant, analysed in these two different States;  
yields very saint Marks of Acids, till the last Portion but one j  
hut yields, thro’ the whele Operation, a-great deal of volatile  
Salt; and the young Kind yields still more than the other, as  
**I** have already observed; which Circumstance inclines me to  
place it in the fourth Class Of Plants, in the Analysis of which  
the Acid appears Very little. Or not at ash But she following is  
a new, and hitherto unknown. Method of making she Acid of  
the Leaves os Lettice appear Vastly more Yhim it doos by any  
other Process. Instead of carrying on the Analysis of theLeaVeS  
all at once,, by a single Operation, and in one Retort; the Juice  
must first he strongly expressed, and put into a Retort; and the  
bruised Leaves, after Expression, areto he put into another;  
and then both must be subjected to Distillation ; shut perforin-  
ing by two Operations what others do by one. In examining  
each of these Analyses, I have observed that of the Juice of the  
Leaves of cabbaged Lettice to hear a strong Resemblance to that  
of the entire Leaves, when full *of* these Juice; that is, this  
Analysis yields; thro' all its Stages, a great deal of volatile Salt,  
arid Very few Marks of Acid, and that only in one Portion;  
whereas the Analysis of the express'd Leaves, being divided into  
thirteen Portions, shews no strong Signs of a volatile Salt but in  
the last, -and some flight Marks of it in the last hut one; and  
in the three first ; but the Acid shewed itself in all the Portions  
except the last, and in several of them it appeared -very evident,  
and in great Quantity. -

I observed Very near the same Differences in the Distillation  
Of the Juice, and the expressed Leaves of the small Lettice;  
whence it appears very plainly, that if the whele Quantity of  
Acid, which discovers itself so clearly in the Analysis of the  
expressed Leaves of Lettice, he so obscurely perceived in the  
Analysis of the same Leaves, when entire and full offence, the  
Reason is, not because all that Quantity of Acid as less really  
existing in the different Portions of this last Analysis, than m  
that of the expressed Leaves; but because it is suppressed and  
absorbed by the great Number of Volatile Salts, afforded by the  
Juice of the Plant, which must, of necessity, he wanting in  
the Analysis of the expressed Leaves, these bring deprived of  
their Juice.

To proceed; what more augments the Quantity of Acids,  
concealed and contained in the different Portions of the Analysis  
of the Leaves of the Lettice, is, that besides those just now  
Observed, which the expressed Plant affords to those Portions,  
they will receive a considerable Increase from the Juice: For  
.tho' this Juice, analysed by itself, manifests but very littieAcid,  
it will be easy to perceive a greater Quantity of them, ifyou  
cause this Analysis to be preceded by such an Operation as was  
'performed upon the Juice of Sorrel, and upon several other  
plants ; which is, to let the Juice macerate for a sufficient time,  
**or** to evaporate a good Part of it in Balneo Mariae. -

Is then Lettice, in which the Taste and common Analysis  
Indicate so few Acids, do yet contain, and actually yield a-great  
Quantity of them in the different Portions of their Analysis, as  
has been proved, we have Reason to suppose the same thing of  
several other Plants, which are in the same Circumstance with  
the Lettice, with respect to the Volatile Salts, which abound in  
their Analyses, and the Quantity of essential Salts, with which  
’ these Plants are naturally impregnated ; for the Quantity of  
Acids must bear a Proportion to that of these Salts, as we shall  
now shew, in giving the Reasons of a Very common Observation  
upon the Analyses of Vegetable and animal Substances compar'd  
Together.

\Ve have already observed in the preceding Memoir, and the  
Beginning of this, that animal Substances in general dhew so  
Tew Signs of AcidS, in all the Portions of their Analysis, per-  
formed in the common way, that if we were not otherwise  
convinced, that they really contained a great Quantity; but were  
to refer ourselves sor Proof wholly to these Analyses, we should  
absolutely deny, that there was any Acid, if not in all, at least  
in the greatest Part of these Substances : But the Case is not  
the same with Vegetable Substances, analysed like the preceding ; :sor it is observed, that the greatest Number of these Substances  
disclose a good Quantity of Acid ; that there are but few of ‘  
them which manifest but a very stnall Quantity, and yet fewer  
‘which exhibit none at all.

The most easy and obvious Hypothesis, to - account for this -  
‘ Difference in the Analyses of Plants and Animals, is, that Plants  
-in general contain a sar greater Quantity of Acids than Ani- -  
-mass; and. consequently- the Portions of-theif Analyses heing \*  
much more impregnated with them. It is natural, that they

should also manifest them much more: But we have already  
shewed,, both in this and the preceding Memoir, that- if wt  
always judge of the Quantity of Acids contained in any Sub:  
stance, by the Signs of it which appear in the Analysis, wt  
should frequentiy he exposed to Mistakes; and somuch the  
more, heeause there may he a Substance which discovers' little  
or nothing of Acid in Distillation, and-yet may contain more,  
or at least as much of it, aS another Substance,- whose Acid ma-  
nifests and displays itself in every Portion os its Analysis. - .This  
may well be the Cafe of animal Substances, with respect to Ve-  
getables ; and, indeed, there are few Plants from which we can  
extract more Acids than from a great Number os animal Sub-  
stances, by means of certain Processes. We shall not here  
enter into a nice Detail of Acids, which is fo much the  
-less necessary, as out-Busmess is not to compare Hants with  
Animals in particular,- but to make a general Compurisonof. all  
vegetable with all anirnal Substances i But we may always-know  
in general, by what Rule to guide our Judgments on that Suh-  
ject; by considering the natural Composition, and relative  
^Quantity of the two Salts, which prevail in both the Substances  
in Question.. As to. whet regards the natural Composition of  
these Salts, we have shewn, that whet abounds inAninialsiisa  
'true Sal Ammoniac, that is, a Compound of Aoids lodged in **a**-Volatile Matrix 5 and that the Salt which prevails in Vegetables,  
is also a Compound of Acids lodged in a fined Matrix. The  
Matrix of each of these Salts, then; being a kind of Maganino  
os Acids, and those Very numerous, as Experience demonstrates,  
tho' we had not found the Secret OLextracting a great Quan-  
Tityof AcidS from animal Substances, they may yet he supposed  
fto contain a good Quantity of them,, fnerely from this Consi-  
deration, that -they are impregnated - with a great deal of Sal  
: Ammoniac. - To know whether they contain less than Vegeta-  
\*bles, let us consider, first, that Animals being non rishM - with  
Plants, or other Animals who themselves lived on Plants, the  
Parts of the Vegetables pass with them Salts into the proper Suh-  
stance of the Animals; consequently-the AcidS pass thither, and  
may there he found again. This being the Cafe,- we-see **no**Reason why there should be a less-Quantity of Acids in the ani-  
mal-than in the Vegetable Kingdom ; -or, to render the Compa-  
rison more sensible, .why an Animal which lives but upon one  
or two sorts of Plants, and receives into himself-all- that t.s in  
these Plants; should contain fewer AcidS in all his Parts, than an  
equal Weight of Vegetables in all their Parts. In short, all the  
’ Alteration that happens to Salts of Vegetables, in their passing  
into Nutriment for Animals, is, that their Matrix, which was  
fixed in the Plant, becomes volatile-in the Animal; and for  
the same Reason, That the Matrix of: Sal Ammoniac becomes  
-sired, in passing-from-Animals into Plants. But this Change in  
.the Matrix of Vegetable Salts has -no -relation to the Quantity  
of their Acids, which may aS well reside in a Volatile aS in a  
fixed Matrix ; and it should seem even possible for them to he  
contained in -greater Quantities in a volatile than in a fixed  
Matrix , as we shall presently shew by sensible Experi-  
ment.

We shall observe. In the second Place, that when we consi-  
der, and compare together, the Juices of Animals and Plants,  
which are our ordinary Nourishment, it does not appear, that  
Plants are more impregnated .with Salt than Animais; **the**Taste might even seem to indicate, that there are more aqueous  
Parts, and less Salt, inPlants than in Animals. But supposing^  
the Quantity of Salt to be equal in both, it is easy to shew, that  
any Portion-ofche Salt, which is predominant in Animals, con-  
tains as much Acid as thelikePortionof the salt which abounds  
in Vegetables; Experience might even make us believe, that it  
-contained much more; and that, eVen.when the Portion of Sal  
Ammoniac contained, for Instance, in a Pound of animal Sub-  
stance, is less, by half, than that of another kind of Salt lodged in  
a Pound of vegetable Substance, the animal Substance, by virtue  
of its Salt, should contain-more Acids than the vegetable.  
There is no other way to come to a Certainty in this Matter,  
than to chuse two highly alcalineSalts, one fixed, and the other  
Volatile 5. for Example, the Salt of Tartar, which is known **to**he the most powerful Alcali among fixed Salts, and the Volatile  
Salt of Peach-flowers, which is also one of the most powerful  
Alcalies amongst Volatile Salts. If an equal Quantity of these  
two Salts he saturated with the same acid Spirit, the Spirit of  
Salt, for Instance, vou will find, that one Dram of Salt of Tar-  
tar requires two Drams and a half of Spirit os Salt; and one  
Dram of Volatile Salt of Peach-flowers requires eight Drams of  
the same Spirit: Hence it appears, that, taking equal Quantities,  
a Volatile Matrix absorbs and contains abundantly more Acids  
than a fixed Matrix; and, consequently, that a Quantity of the  
Sal Ammoniac, which is predominant in Animals, is so sar from  
containing sewer Acids, that, on the contrary, it contains more,  
than the same Quantity of Salt' which resides particularly in  
Plants.

In short, tho\* one should fuppofe gratis, and without solid  
Foundation, I might eVen venture to say, in spite of experi-  
ments to the contrary, that- there are generally more Acids in  
Vegetables than in Animals, the Supposition must be carried

to an excessive Length, and beyond all Probability, to account  
for what we commonly observe in the Analyses of Animals ;  
that is, why the same Process always shews, or Very seldom  
sails to shew, the Acid in Vegetables, and commonly in great  
Quantity, and seldom or never shews it in Animals. One  
might even say, that if there were no other Difference between  
Plants and Animals, than that of their heing more or less  
stocked with Acids, Animals might not indeed afford:so many;  
Marks Of .them in their, Analyses, as Vegetables, but they!  
would always give .Marks of some Acids, either more or less,  
and their Analyses would not be so uniform as they are, without  
discovering any at all, without the Help of Mediums, of which  
we shall take Notice hereafter. We must then have recourse\*  
to another Cause than what has been assigned, to explain the'  
Difference which we find hetween the Analyses of Plants and  
Animals;, and we shall now shew, that, fuppofing aS great a'  
Quantity of Acids, at least, in Animals as in Vegetables, all:  
that we observe in their Analyses, ought necessarily thus to hap-  
pen, according to our. way of.Reasoning, which is a natural  
Consequence from what has been said .in this and the precede-  
ing Memoirs. so...: .. r . r/ ί... δ

- That the Acids, qontainjed. in the Compound, .might shew  
themselves in the several distilled Portions of Its Analysis, it is  
not sufficient, that each Portion he really much impregnated with  
it, but: it is also necessary, ithat theAcids should .be more free  
and disengaged tn every Portion of the Analysis,, than they;  
were in thevery Bosom of the Compound. To give an Example  
As long as the Acids of Saltpetre, are lodged in their natural  
Matrix, they shew no Signs of Acidity; but they exhibit Very  
many when theDisttllation has disengaged them from, that Ma-  
trix, which remaining at the Bottom of the Vessel because of  
Its Fixity; -resides no more with them in the same Place, i For  
it is to he observed, that issthis. Matrix, instead of heing fixed,:  
bed been Volatile,, it would have risen.with them, and always  
have rendered the Acids imperceptiblewhich is easily proved,  
by Urging with Fire Sal Ammoniac after two different manners,:  
that is, alone; and with, a fixed and alcaline Medium. And,,  
indeed, if we suppose the Operation to he made without a Me-  
dium, the Sal Ammoniac will rife entire ; and the Acids not.  
having been disunited from their Matrix, they will be sound,  
again together on the Sides of the Head, nearly in the same  
State, and as much encumber'd as they were before the Subli-  
mation ; and if, before you subject the Matter to the Fine, you  
mix it with Water and a Medium, a great Part of the Acids  
will remain at the Bottom of the Vestel with the Medium;  
and. if the Volatile Salt should carry off some. Acids with is,  
they will he less in a Condition to appear after, than before the  
Operation, thocause the Quantity of.these Acids will be then  
much inferior to those which resided in the Matrix. Hence it  
follows, that if we suppose a Mass of Sal Ammoniac to con-  
tain twice or thrice as many Acids as another Mass os Salt/  
fuch as Saltpetre, that is, such a one as shall have a fixed Ma-  
trix, all that shall be elevated from the Saltpetre by the Action  
of the Fire, will.give,infinitely;more inconsiderable Tokens of  
Acids, than what shall proceed by Distillation froth a Mass of  
Saltpetre mixed with a convenient Medium, beforehand. .  
. This is ’exactly what happens in the ordinary Analyses of Ve-  
getables and Animals ; and tho' we should suppose in these last  
as many or more Acids than in the others, andthould imagine,  
that there .arise from them in Distillation, as many and more  
Acids than from Vegetables, yes, as the Salt of which they  
are particularly composed.is Sal Ammoniac, the greatest Part  
Of the Acids,’ which rise by means of the Distillation, thus rife  
with their proper Matrix, from which they were never sepa-  
rated ; for which Reason, the Operation contributes nothing at  
all to the making of them more perceptible than they were  
before. As for the Acids which were separated from their  
Matrix, and were sublimed by themselves, and commonly at  
the End of the Operation, they always find in the Receiver a  
much greater Quantity of Volatile Salts than is necessary to ah-  
forb them ; and they never sail of heing absorb'd,. if you don't  
take care expeditiously to separate these Acids by way of Recti-  
fication ; and oftentimes, how speedy soever you are, either  
the Acids have already disappeared, or you can perceive but  
very sew of them. This gives Occasion to observe, that when  
the Analyses of Animals manifest some Visible Acids, they are  
never such as rise with their Matrix, and never abandon it,  
but such as, after having been separated from it, came over at  
the End of the Operation, in proportion to the Heat of the  
Fire. Therefore if you have a mind to have a greater Quan-  
tity of these Acids appear, you must labour to disunite a great  
Number of them from their Matrix, to make them rife sepa-  
rately, and to prevent their Reuninn. A Method not com-  
monly used in analysing animal Substances, the Neglect of  
which will render a Part of their Acids imperceptible, is as  
follows: ' . . . .

... The first Step in this Process is Maceration, which produces  
in animal Substances what we have already observed it. to pro-  
duce in Vegetables, that' in, it makes way for a great Number  
of Volatile Salts to disengage themselves from their Acids, and

to disperse themselves in the Air, or renders them more dis-  
posed *so* to do upon the least Heat. By this moans you set at  
Liberty a certain Quantity of Acids, which could never have  
been done without it. For Example: It is observed, that whets  
Urine is new, and has not fermented, its Phlegm rises before  
its Volatile Salt, and that it shews no Sign of Acids ; but when  
it has fermented, its Volatile Salts rise first, then its Phlegm,  
and, lastly, a red Liquor, which is manifestly pregnant with  
Acids. . .

- The second Step is, to intermix, a fixed and alcaline Medium -  
with the animal Substance which is to be analysed, in Order to.  
disengage a greater. Quantity of Acids from their Volatile  
Matrix, and to put them in a Condition of rifing afterwards  
separately, and to be distinguished from it.

E. The third is, in the Beginning of the Distillation to make-  
use of a Heat so gentle aS to be only capable, as I may fay, of  
raising the Volatile Salts, with Intent that the Acids, which will  
come over afterwards with a stronger Heat, may he accom-  
panied with a less Quantity of Volatile Salts; and fo.bring less  
confounded with them, may make themselves more easily  
known. . .

χ The fourth is, to increase and continue the Fine for a long  
time, and at last to carry it to the utmost Degree of Violence, in  
order to release the Acids which were detained by .the earthy  
Part of the Compound, and without this Assistance would never  
fise,- or rise in so small a Quantity as hardly tothedistinguished..  
’-Tis oftentimes for want, of this Circumstance, that the Acids  
of animal Substances fail of appearing in their Analysis ; for  
those Acids which come oyer towards the End of the Opera-  
tion, are the only ones which can be made to appear, be- ,  
cause no others have been well disengaged from their volatile  
Matrix. -:

Lastly, As soon aS Distillation is finished, we must set about  
Rectification, especially of the last Portions, in order to sepa-  
rate as speedily aS possible the Acids, which lie there confound- ‘  
ed with, the volatile Salts, and not give them time to reunite  
with their first Matrix. ‘

. This Method being regularly observed in the Analysis of ani-  
mal Substances, if we should not be able to extricate all the  
Acids, we shall however always discover a great Part of them..  
*♦ As* to what regards, at present, the Analyses of Vegetables,  
the greatest Part of their Salt being the Opposite Of Sal Ammo-  
niac, or, what amounts the same, the most part of their Acids  
heing naturally engaged in a fixed Matrix, when the Fine has  
disengaged and carried them aloft, they don't find their Matrix  
again in the Receiver, nor rife with it, as do the Acids of  
Animals; hence they lie more open than those Acids, **and**more easily preserve themselves in that bare and open Condi-  
tion in which they were put by the Fire. ’Tis true, however,  
and we have already observed it, that several Plants yield Vola-  
tile Saltin the Analysis, and oftentimes enough even to make  
great Part, of their Acids to disappear. But it must be .consi-  
dered, that as Plants naturally impregnated with Sal Ammoniac  
never contain so much of it as Animals, and that aS their Sal  
Ammoniac is always joined with a much greater Quantity of  
another Rind of Salt, which is not in Animals, so they not  
only have always fewer Volatile Salts, but also the Proportion  
or Quantity of these Salts, with respect to that of the Acids,  
is always less in the different Portions of the Analyses of Plants  
than of Animals. And indeed the Volatile Salts raised from an  
animal Substance by Distillation, have scarcely, to speak pro-  
perly, any thing in the distilled Liquor to balance them, except  
the Acids, which they before contained in the Compound, and  
which, in this Very Liquor, are found in less Quantity, in pro-  
portion to the Volatile Salts, than in the Compound itself, as  
we said before; whence it comes to pass, that these Salts are  
always more than sufficient to answer the Acids, and conse-  
quently to make them disappear. But for those Volatile Salts,  
which come over from a vegetable Substance, besides the Acids  
which they contained in the Vegetable itself, they are also to  
answer to those which proceeded from another Matrix, I mean  
**a** fixed Matrix, which is the most plentiful Source of Acids in  
the Vegetable Kingdom. Wherefore as these Salts are not suf-  
ficient at once for two Sources of Acids, so the same Process,  
that will hardly render manifest any Acids in animal Substance,  
shall commonly make them appear in Plants which yield the  
most Volatile Salts. And if it happens, in Tome Analyses of  
Plants, that the Quantity of Volatile Salts is large enough **to**hinder the Acids from rendering themselves perceptible in  
the Procefs just hefore-mentioned, which Very seldom happens  
if we use the fame Method upon those Species of Plants, which  
we before recommended for discovering the Acids of Animals,  
we shall find by Experience, that this Method will still meet,  
with fewer Obstacles, and consequently still operate with more  
Dispatch, both upon Vegetables and Animals.

We have no more to do at present, but to make some criti-  
**cal** Reflections on the Analyses of Plants, with respect to **the**Acids rinsed from them by Distillation. And, first, when **we**consider only the Acids which offer themselves to View in  
these Analyses, without looking any farther, or at least with-

- out duly reflecting, that there are always in a Plant concrete  
and essential Salts, which actually contain large Quantities of  
Acids, such as Saltpetre, from whose Bosom the Acids we  
speak of proceed, we might be ready to imagine, that those  
Acids, which the Analysis represents to us under a fluid Form,  
disengaged from earthy Mattes, and sufficientiy free and dis-  
closed, were after the same manner in the Plant itself; and that  
they were not there lodged, as they really are, in a solid Ma-  
trix, in Conj jnction with which they formed a concrete Salt. . -

A second Error into which the Analysis might he ready to  
lead us, is concerning the Quantity of Acias which offer them-  
selves to our Senses. Here perhaps we may inconsiderately  
assure ourselves, thet some Plants contain more or sewer Acids  
than others, according to the Measure of what we see in them';  
' hot how 'tis possible for' us to he mistaken on this Subject,- has  
heen sufficiently proved in the Course of this Memoir.

- We shall observe, in the third place, that the Acids which  
are difledged *by* the Analysis from the fixed Matrix, do not  
always remain in that destitute State, but frequently possess  
themselves, as we have said, of other Matrices, either saline  
and volatile, or purely sulphureous, with which they form new  
Compositions. So that all these Metamorphoses, winch are  
the Effects of the Analysis, cannot chuse but deceive us as to  
the natural Order and Disposition of the Parts of the Plant.

Lastly, the Analysis os Plants plainly lets us see the Acids in  
them; but these Acids are so much blended and confounded  
with other Substances, that it is impossible to -distinguish these  
particular Character; and thus all Plants appear to us, by this  
.way, to contain the same Acid. It is however a Matter of  
Importance to understand and distinguish the particular Nature  
os the Acids os Plants, such a Knowledge having a great Influ-  
ence towards an Insight into their Virtues ; for it is very true,.  
that different Acids, lodged in the same Matrix, form Com-  
pounds of very different Properties; for Example, natural or  
artificial Saltpetre, and vitriolated Tartar, have the same  
Matrix, but by no means the same Virtues. Mercury, pene-  
trated by the Acids os Spirit of Salt, is much more corrosive  
than when it is impregnated and covered with those of Spirit  
Of Nitre ;. consequently two Plants, whose Effects are different,  
and, which in regard to their Analyses, do not appear todiffer-  
in Nature, nor even in the Quantity *of-* their Acids, may yet  
, differ very much in this respect, and to this Difference he ac-  
countable, if not wholly, at least in part, for the Difference  
of their Effects. If to whet has heen said on the Comparison  
os the Acids of several Plants, we add the salse Resemblance  
which Analyses may represent to-us, in comparing other Sub-  
stances of which each of those Plants are compounded, and  
which, tho’ really different in the natural State of every one  
of those Plants which are thus compared, do yet appear,, after  
the Analysis, under a like Form, this Reflection may perhaps  
serve to account for the Observation made on *Solanum furiosum,*and the *Brassica capitata,* one of which is Poison, and the other  
Aliment, and yet in then Analysis they produce Substances so  
much alike in Appearance; that you would say, these two  
Analyses were made of one and the same Plant. *Mcrnoires  
de Γ Acad. Roy. des Scierit.* **I72I.**

In the. Course of this Work, I have been obliged to give  
such Analyses of Plants, Animals, and Minerals, as I could  
find in the best Authors ; and amongst others, in *Tournefort,*who has employed some Methods of examining into the speci-  
fic Natures of Plants, with which the Reader must be made  
acquainted, in order to his understanding the Inferences from  
the Experiments he will meet with. I shall therefore insert the  
following Extract from the Preface to Dr. *Martyn? s Tourne-  
font.*

I. By the Chymical Analysis of Plants is ineant, the Sepa-  
ration of their Principles, by means of Fire, and proper Vesseis; ’  
to which End we distil fresh Plants in an Alembic, or in *Balnea  
Maria:* Or before you proceed to distil them, they are to ma-  
cerate or digest for some time, according to the Nature of the  
Plants, or the Intention that you have : It is proper to separate  
the Substances which are obtained from it, into Portions of  
four or six Ounces, the better to examine separately their Cha-  
racters. ‘ You commonly draw off by this means the Phlegm,  
the spirituous Water, or the burning Spirit of Plants; when  
the Distillation is ended, you pur the *Residuum* into a Retort,  
and giving Fire by Degrees, you draw off from the generality  
of Plants an urinous Spirit, a Volatile concrete Salt, and a  
fetid Osh . Ἀ

From the Caput Mortuum lixiviated, we separate by Filtra-  
tion and Evaporation the Salt that was mixed with the Earth.

2. By acid and. alcaline Salts, are meant those two Kinds  
of Salt, to which the Physicians and modern ChymistS have  
given these Names-: See the Articles ACID and **ALCALI.**

. 3. By essentixi Salt, is meant that which forms itself by the  
Crystallization os the Juice of Plants; We find this essential  
Salt in the Extracts of such whose Juice doesnot crystallize.

4. her the Volatile Salt of Plants, is meant thoSalt, which,  
in the Distillation of Plants by the Retort, sticks to the Sides  
of the Receiver. . ' . - -

5. By the fixed Salt of Plants/is meant the .Salt which is  
made by Elixiviation of the Ashes of Plants burnt, or from the  
Caput Mortuum os thofe which are analysed.

6. To discover the Acids, we have not only made use of  
Salt of Tartar, Lime-water, Spiritjos Sal Ammoniac; and such-  
like Substances, with which Acids generally ferment; we use  
likewise the Solution os Turnsole,. or blue Paper, which is  
nothing else but common Paper; coloured with Turnsole, dis-  
solved in common. Water .the alcaline Salts make no Change  
on the Turnsole; the Acids, according to their Strength, redden  
it by Degrees, from a Very saint Red to a Very lively onen  
You meet with the Turnsole commonly at the Colour-shops ;  
they are little Cubes os a deep-violet Colour, and give, a blue  
Tincture; but it in a Colour the most susceptible os Alteration  
that I have yet sound; for the weakest Acid will, change it  
Milk is also sometimes made use os,.to try is certain Acids will,  
curdle it. . *s t.i . \* - :. . . ysc  
-,η.* To discover the alcaline .Salts, we have used-not onjy  
the Spirit of Nitre, of Sals, of Sulphur, of Vitriol., and other  
Acids, with which Alcalies commonly ferment; a hut also of  
corrosive Sublimate diflolved in common Water: Acids do not  
at all change the Colour of this Solution; but it becomes ch-  
score, milkyedyellow-orange-colonred, and curdles according to  
the Strength of the alcaline Salts: These Salts .also change  
white, green, or curdle the Solution of Galls, and."that of  
Copperas; but these, two last Experiments are not so certain as  
those of the Sublimate ; for there are some Acids, aS we shall  
see hereafter, that change also the Solution of Copperas, and  
the Infusion of Galls. ; :: ..

\* 8. AS Sal Ammoniac discovers itself by its Volatile or urinous  
Salt, Oil of Tartar, or Lime-water, has been used th discover  
whether there be any Sal Ammoniac in certain Plants; for then  
they emit ah urinous Spirit, like that which exhales from Urine,  
or Sal Ammonias, when they are mixed with Oil of Tartar,  
or Liine-water: Lime-water and corrosive Sublimate, com-,  
**bined** in a certain manner, with a Solution os Sal Ammoniac,  
distinguish also the Nature of tho Sal Ammoniac; for the her-  
lution of this Salt, mixed with Lime-water, hinders its he-  
Corning Yellow, or Red-orange : When we pour on the Soln -  
tion of Sublimate corrosive, the Whole becomes white aS Milk;.  
on the contrary. Lime-water, mixed with the Solution of Suh-  
limate, turns yellow or red aS before, altho'it is jom'd to that  
of Sal Ammoniac. Thus, as the urinous Salt of Plants is nut  
altogether without Acid, I helieve it is hetter to say, that **a**Plant acts by a Salt approaching to Sal Ammoniac, than by **a**pure Volatile Salt; and. so much the more, because the Plants  
which yield a concrete volatile Sait, redden the blue Paper  
in like manner aS Sal Ammoniac does, except where **a**great Quantity of Oil smothers the Acid, and hinders its Ap-  
pearance. '\* - ......... :

. 9. *As* Nitre discovers itself by Detonation, I believe the best  
means to know nitrous Substances certainly, is to throw them  
upon burning Coals.

io. Every body knows, that the most remarkable Property  
of Vitriol is to blacken the Infusion of Galls; therefore we  
ought to mix the Bodies which We examine, with this Infusion.

II. To know whether there he Sulphur in any particular  
Body, it Teems to he the best way, to put it in Digestion in  
good Spirit of Wine, to fee if it draws any Tincture: The  
Readiness which these Bodies have to Catch Fine, is also an In-  
dication of Sulphur. The dry *Elaterium* burns at a Candle ;  
the Extract of *Sedum majus vulgare,* C. B. does not burn at  
all; therefore the first contains a resinous Matter, which we  
do not find in the other. The oily Substances hecome soapy  
when they are mixed with Lime-water, or Oil of Tartar.

The following Experiments may serve to shew the Nature  
of that Salt, which we Can draw from the Earth, without the  
Help of Fire,

Take Plaster into a low Pisce, where there has not been any  
- Chimney; pound it, and put it into a Pall of Water,  
' covering it half a Foot r After an Infusion of four Days,  
if the Water does not afford any Sign of Saltness, and  
does not change it at all by the forementioned Experiments,  
let it be put again upon fresh Plaster taken from the same  
Place. .. . - .

The second Infusion grows a little reddish, acrid, saline and  
hitter. ' ; ' '

**I.** It made but a saint Impression of Violet upon the blue .  
Paper.

2. It did not curdle Milk at all.

**3.** It did not receive any Change from Spirit of Nitre.

4. It made the Infusion *of* Galls muddy, and rendered it  
whitish; afterwards it made a pretty thick Coagulum, followed  
with a Precipitation.

5. When it was mixed with infusion of Vitriol, it became  
**a** dark, tawny Colour.

**6.** It rendered obscure a Solution of Sublimate corrosive.'

7. The same Infusion, mixed with Oil of Tartar, instantly  
made a white Coagulum ; immediately after was perceived a very  
considerable urinous spirit. Mixed with Lime-water,, it did  
the very-same, without finding in eitherOf these Experiments  
either Effervescence or Heat.- - . - -- Ϊ-

8. Substituted in the room of Sal - Ammoniac, it whitened  
Lime-water, when it was added to the Solution of corrosive  
Sublimate ; tins White was not so lively as That which appeared  
by means of the Solution of Sal Ammoniac', ῖ γή...

It appearsthy the fourth,' fifth; and sixth Experiments, that  
the Infusion of Plaster contained-an alcaline Salt 4. and by the  
seventh and eighth, that it contained Sal Ammoniac. The  
first'discoyered fome Acid -in the same Sait - Thss seems .to.be  
scattered through -the Whole; for when they whiten old Houses  
with Lime, -one’1 inay Perceivedan-urinous Smell Tor a Day; or  
two. \*'r: so *l-.'.rsl.* .0 durmutO υ.ί: .X.LsegnoO A - X.-.:: op:;.

Beside. Sal Ammoniac, the Infusion of Plaster evaporated  
yields Nitre, which discovers dtself by 'Detonations. *It* -is sepa-  
rated also from a marine Salt. *A .: rim*

: The Tnfusion os Earth, scraped from the thigh Rooss of  
Vaults, is sound to be of the -same Nature with that of Plasters  
The Infusions used by the Saltpetre-makers of Paris,, contain a  
fixed Sait, hecause they put a certain Quantity of Ashes in the  
Bottom of-their Bucking-tubs, in order, to1 purify the Salt-  
petre. ?i fess' “ *...--"-pote s' .s* feni#mi.ss ς..'.-;

-:Beside the Infusion of Plaster, I made others with Earth, of  
different Natures. To twenty-five Quarts of-Water, I put: th  
infuse twenty Pounds os Mould, from a Garden which had been  
neglectedsor many Years; after four Days Infusion, I passed  
It through a Strainer of- Hair-cloth, and poured the Infusion  
again upon fresh EarthtiossFhe first and second Infusion did not  
undergo any Change with the common Trials. It was put again  
upon another Portion of Earth. I designed Io have made still  
more Infusions, but-the thing was hardly: possible,); because the  
Earth had consumed a great deal of the Water, notwithstand-  
ing the Precaution used to filtre’ it. -.

- This -last Infusion of- the Earth was a little reddish, salt, and  
bitter being half evaporated,- it became like that of Plaster.

. 'TheInfusion of Earth taken from a Piece- of Ground not  
dunged, that *os* Kitchen-garden Earth and Mould, afforded  
nearly‘ the same Characters as that of Plaster, except that these  
last Earths sent forth an urinonsSpirit more penetrating than that  
of the first : Besides, the infusion of all these Earths whitened  
the Solution of corrosive Sublimate a great deal more than the  
Infusion of Plaster.. .

The *NatrumDr Anatron* of *Egypt* made the same Alteration  
upon the Solution of Sublimate; and as in *ths Levant* we .find  
this Salt naturally in the Ground, it in no Wonder that it should  
have some Similitude with the Infusion of that of this Country.'  
-.The *Natrum* seems to he..nothing else hut a marine Salt,  
mixed with a natural alcaline Salt. These Saits are not per-  
fectly united together; for if you go to steep a Piece of *Natrum*in Water, it dissolves at first only that which makes the least  
Resistance; and that Part being dissolved, you .may see, in that  
which remains, a great many Cavities something like those os  
Sponges. ... .. ‘ .. .» ... . -

*Natrum* has the Taste of marine Sait,, and crackles in the  
Fire; Jt makes no more impression upon blue Paper, than  
marine Salt; it does not at all ferment with Spirit of Sal Am-  
moniac ; it makes a white. Coagulum with the Infusion of  
Galls ; mixed with Lime-water, it does not hinder its turning  
yellow, when mixed with a Solution of Sublimate; marine  
Salt does , the same ; it ferments , considerably with Spirit of  
Nitre, which marine Salt does not.

The Solution of *Natrum* renders that Os Copperas os a very  
dirty Green, like Sea-green. This Change seems to indicate an  
alcaline Salt, fince if comes to the same when mixed with Oil  
of Tartar, or Lime-water, with a Solution of Copperas ; and  
this Sea-green is wholly-destroy'd by the Mixture of Spirit of  
Nitre, winch, uniting itself with the Oil of Tartar, causes st  
to part with the Copperas. : '

Upon these Experiments we have related touching the Irish.,  
sion of Plaster, and of the\* different Sorts of Earth, we inay  
reasonably advance, . . . - ί-

I. Thet there is in all Earth, what we may cast a natural  
Salt, whether the Earth, has always been impregnated with it.  
Or in is continually made by tire Mixture, of rotten Plants, the  
Dung of Animals, the Air, or other Causes which we are  
ignorant of. This Salt participates of Nitre, of marine Salt, or  
Sal Ammoniac, of Alum, and of Vitriol.-. i'' J 'V

2. That in the Salt of the Earth there is an alcaline Salt,  
different from the Sal Ammoniac ; for the infusion of Various  
Earths, and the Solution of *Natrum,* whitens the Solution Of  
Sublimate corrosive, which the Solution of Sal Ammoniac, will  
not do ; on the other.hand, The *Natrum* ferments considerably  
with Spirit of Nitre, and the Infusion of Earth, boiled a little  
with the same Spirit, which, we do not find when we mix the  
Solution of Sal Ammoniac with Spirit of Nitre; dur'1

3. It appears also,' that, the- Bodies which we draw from  
Earth, without the Help os Fine, afford us, but small Signs of

Acid, except Alum and Vitriol , The following Observations  
are relating to common Salts. .

L

NIT RE

I. Nitre makes no Impression upon the blue Paper, nor  
upon Solution of Turnsole, nor upon Syrup os Violets.

.An. One cannot draw a Spirit of Nitre, without a very vio-  
lent Fire'S This Spirit reddens Very lively the blue Paper, Solu-  
tion of Turnsole, and Syrup of Violets. I

.. 3. Nitre inflames upon the Fire, and kindles readily : The  
Spirit ofNitreextinguishes it. ' .

’ 4. It does not curdle Milk s The Spirit of Nitre curdles it  
instantly."/ssetss : / - sese. \ ...... '. " ..

2. 5; It does not change the Colour os Oxis Cali f The Spirit  
OT Nitre makes it. red.: I suppose,'by the uniting itself with  
the acrid Salts, which had perhaps contributed to yellow the  
Sulphur of the Blood, it is a Means of making thisLiquor  
return to its natural Colours ' ' ' ’

*i* 6. It Jmakesa white or greyish Coagulum, with Infusion of  
Galis : The Spirit of Nitre does not alter this Infusion.

. 7. Neither. Nitre,.*nor Its* Spirit, alter the Solution os Cop-  
perasi " "'"T ' ' su

*8.* Nitre, and Oil of Tartar, make an almost insensible  
Ebullition, wherein there appears to be an Agitation os the  
Parts, like those of Dust, which you may see move about the  
Air in a Very light Place:' The Spirit of Nitre, and Oil os Tar-  
tar, ferment without Heat, but with a great Froth, and after-  
wards it becomes a very thick Coagulum.

9. Nitre does not hinder Lime-water becoming yellow,  
when mixed with the Solution of Sublimate:.. The Spirit of  
Nitre only raises a few Bubbles in the Lime-water, all appear-  
ing as transparent as before, although the Sublimate corrosive be  
poured upon it. ς. . χ .

Io. The Solution of Nitre, and the Spirit os Sal Ammoniac,  
do nothing at'all: The Spirit of Nitre, and Spirit of Sal Am-  
moniac, ferment.. . - . ' ’ .

II. The Solution of Nitre, and thet of corrosive Sublimate,  
do not immediately change; hut about a Quarter of an Hour  
after they are mixed, they become white.

*12.* The Solution of Nitre, and Spirit of Salt, do not change  
at all. None of these Experiments discover any Signs of  
Acidity in the Nitre;. for that which happens in the ninth is  
insensible ; the sixth and eleventh rather shew, that it contains  
an alcaline Salt ; nevertheless Fire draws from Nitre one of the  
strongest Acidssthat we know.'? \* ' ?

IL

- . - /δ᾽ ; S E A-S ALT.

I.. Marine Salt does not alter the blue Paper, nor Solution  
of Turnsole, nor Syrup of Violets.

2. One cannot draw the Spirit of Salt without a violent Fine;  
this Spirit tinges blue Paper, and the Solution of Turnsole, of  
a lively Red. ' .

\* 3. The Solution of marine Balt whitens a little the Solution  
of Sublimate. - - . ?

4. It muddies the Infusion os Galls, and afterwards occa-  
sions it to precipitate a littie: The Spirit of Salt muddies it also,  
and renders it whitish.

- - 5. It makes the Spirit of Sal Ammoniac obscure, and increases  
the strong Smell: The Spirit of Salt, and that of Sal Ammo-  
niac, ferment with Smoke, and great Heat.

6. It does nothing at all with Oil of Tartar, nor with Lime-  
water: Spirit of Salt ferments Very much with Oil os Tartar,  
but without, sensible Heat. This Spirit does not ferment at all  
with Lime-water; ' Ψ - '

7. It does not hinder Lime-water from turning yellow,  
when mixed with Sublimate: The Spirit of Sait hinders it en-  
tirely and' the Liquor, aster the Mixture of Sublimate, is  
more transparent than before.

" It. appears by the third and fourth Experiments, that marine  
Salt contains an alcaline Salt ; and by the fifth, that it is some-  
what acid. *.s ;*

In;

VITR I O *L.*

I. The Solution of Copperas, or common Vitriol, is saline,  
styptic, afterwards sweetish. -

2. Jt reddens the Solution of Turnsole, and blue Paper ; het  
this ismot a lively Red.

3. It gives. Syrup of Violets a small greenish Cast,- sar from  
reddening it.... . . .... -

An We cannot draw the Spirit and Oil of Vitriol without an  
intense Heat ; the Spirit and Oil redden the Syrup of Violets to  
the ColourofOxss Blond. ... . .....

5, The Spirit of Vitriol colours the Paper of a. Very lively .  
Red, and the Solution- o? Turnsole of a Red-somewhat less  
lively : The Oil does the same,- but- it ferments- and grows  
hot with Solution ofTurnsole. - - ἄκἰ-'ἄκ:.

6. Every body knows, that Copperas, mixed with Infusion of  
Galls, makes Ink ; but every body perhaps does not know,  
that Ink reddens blue Paper: Mixed in a very little Quantity

s with Solution of Turnsole, it gives it a littie reddish Cast ; but  
this Colour is less sensible, than upon the blue Paper.

.-7. The Spirit of Vitriol muddies and whitens a littie the  
Infusion of Galis: The Oil of Vitriol thickens it, makes it of  
an ash Colour, and it makes a thick Precipitation. 'ἐν

8. The Solution of Copperas, its Spirit and Oil, curdle  
Milk. . ‘ - u  
. 9. It does not change at all that os Sublimate corrosive. ,J‘ Io/It becomes a grey-brown and like Sea-green, 'mixed  
with Oil .of Tartar, or with Lime-water. This Colour does  
not change, although ft be\* mixed with corrosive Sublimate.  
Spirit of Vitriol,, and Oil of Tartar, ferment with a great deal  
of Froth, and a considerable Heat; but all thefe augment, .if  
instead of Spirit you use the Oil of Vitriol,, and all their Mix-’  
tures income a white Coagulum. - Τ .ᾶ ' . ’ '

II 6Cour mon Water, and Oil of'Vitriol, grow also very\*  
hot, and generally make a Noise; there is no Fluid, that more  
easily grows hot with the Mixture of others 'than the Ost of  
Vitriol. \* ' si- 6 .si-

It appears, by all these Experiments, that Vitriol naturally  
affords a great many Signs of Acidity.. .... . ..' ’ Ἀ

**- . .. TVs,: ' Z6'’6..":**

Ἀ ' - - ' .AEO Μ-. - 6E.si ..ss

**-. I.** Alum is a little saline, and Very styptic. .... .

2. The Solution of.Alum tinges of a fiery Red the blue Pa-  
per, and Solution of Turnsole. Γ - μ

. 3. It does, not alter the .Colour of Syrup of Violets.

*- An st* curdleS Milk. :.i .. ,, . ,

L. 5. It .Instantly makes a white Coagulum, with Oil of Tar-  
tar, but without Heat or Smoke. , j i - ....

, 6. It does'not alter the Solution of Sublimate. .

. 7, It makes the Infusion, of Galis muddy, and whitens it  
considerably, throwing down a Precipitation..

' , 8. It whitens Lime-water a littie, .and this Mixture does not  
turn yellow, when mixed with Sublimate corrosive, but it  
forms littie white Clots like Starch; this js perhaps occasioned  
by the Urine, which is employed in the Crystallization of  
"Alum j so we cannot conclude any thing from all these Lxpe-  
rjments, except that Alum contains a good deal of Acid.

*so Net V- sm staet*

**SAL AMMO NT A.C. . . y**

**I.** Sal Ammoniac is acrid and saline. "

2. Its Solution tinges blue Paper of a dark Red : It does not  
at first change the Solution of Turnsole, but a Day after this  
’ Mixture becomes a reddish Brown. ...

3. It does not curdle Milk.

. An It does not alter the Solution of Sublimate corrosive.

, 5. Mixed with Oil of Tartar, or with Lime-water, it emits  
an urinous Spirit. ' . .

, 6. This Spirit coagulates,. and whitens the Solution of Subli-  
mate. From Sal Ammoniac one may also draw an acid Spirit,  
like the Spirit of Salt ; thus the Sal Ammoniac appears to he a  
marine Salt united with an urinousOne. .

7. The acid Spirit of Sal Ammoniac hinders the Lime-water’s  
changing Colour, when it is mixed with the Solution of Subli-  
mate ; but the whole Mixture becomes white as Milk, if you  
pour on the urinous Spirit of this same Salt, the Sal Ammoniac  
thus causing the same Effect upon Lime-water and Sublimate,  
aS its urinous Spirit does. It is certain, that this is the urinous  
Part, and not she acid Part of this .same Salt, which whitens  
the Lime-water, when mixed with Solution of Sublimate.  
Urine whitens it more saintiy then the Solution of Sal Ammo-  
Iliac.

. 8. The acid arid urinous Spirit of Sal Ammoniac ferments  
with Heat. . -

. 9. If you pour the acid Spirit of Sal Ammoniac upon Lime-  
water tinctured by the Sublimate corrosive, the Whole becomes  
transparent; and all this becomes white aS Milk, *is* you add  
the urinous Spirit of Sal Ammoniac. The Spirits of Salt, of Vi-  
triol, os Sulphur, perform the same as the acid Spirit of Sal  
Ammoniac. '

**ss . . VI. -dur.**

TA RT A R.

**1.** Tartar, which is nothing else but the essential Salt of  
**Wine,** isTourish.' . .

so. Its Solution reddens the blue Paper, and the Solution of  
Turnsole, as lively *set* Alum. .

. 3. It whitens Lime-water, hut it does nut hinder its be-  
coming a Red-orange, when mixed with the Solution of cono-  
. five Sublimate.

4. It makes'no Change when mixed with corrosive Subli-  
mate, or with Infusion os Galis. - . .

5. It does not change with Spirit of Sai Ammoniac,

...6.. Mixed with Oil of Tartar, it does not receive any  
Change.

.. 7. The Spirit of Tartar contains a good deal ofAcid ; it  
gives a lively Red to the Solution of-Turnsole, and renders the  
Syrup of Violets of a reddish Brown,....

i 8. It makes a Coagulum with *Oleum Tartari per Deliquium.*

*Cy.* Mixed with Lime-water, it does not change Colour; but  
if. you pour upon the Mixture a. good deal *of* the Solution of  
Sublimate, the Whole becomes whitish.- Thus St is probable,  
that beside .the Acid,. this Spirit contains an urinous Part; but  
it does not appear To strong .as/op.e would Judge at -first by its  
Smell, .c ῖσςχ . 'τ i . - . Ii *c:.;.:* -4. hesstio. S

'odio. Mixed ' with. the urinous Spirit of Sal Ammoniac, it  
thickens, hecomes whitish,; andmakes a thick CoagUlum.

. II. It rendessfwhitish the Solution of Corrdsiye Sublimate,  
and makes a Coagulum, the Grumes of which are ds the same  
Colour. Iss-ss 70 .- i .4 I ess .ντε .r-i./i i ?...t S '  
-/12. ilt does nothing at all with theaeid Spirit Of Sal Ammo-  
niac. ‘ ' Esu/.-'.-l

jo I.3.. The Salt ofTartar dry, or dissolved into Liquor, which  
is called Oil ofTartar, is acrid, and Very bitter ;. this Bitterness  
does not go away. but by the Mixture, of a great Quantity of  
acid Salt, . ἐν. .-thr:..-.'„ ‘ - ς -‘ἐν ε

I4. .The Oil OfTartar, and Solution ofcorrosiveSuhlimate,  
make an orange Colour, which approaches more or less to.a  
Yellow, according as the one or the other of the Liquors pre-  
dominate ; but .the Whole becomes transparent by the Mixture  
os an acid, corrosive Spirit. ...

*T5.* It does : not give any considerable Change to Spirit of  
Vinegar ; one-discovers only that Kind of trembling, where  
some Parts are stirred like the Appearance of Dust in the  
Sun. -

I6. Oil of Tartar, and Spirit of Vinegar, mixed, don’t for-  
bear turning yellow, when mixed with Solution of Subli-  
mate.

I7. 011 ofTartar ferments with the corrosive acid Spirits,  
in. I8. Oil. of. Tartar, and acid corrosive Spirits, don't sorbear  
turning yellow, when mixed with Solution of Sublimate.

5 I9. 011 ofTartar, and the urinous Spirit of Sal Ammoniac,  
don’t change when mixed; but the Whole hecomes thick, and  
white as Milk, when you pour on the Solution of Sublimate. .

20. Gil of Tartar turns Syrup of Violets green.

\_ 2 I. Oil of Tartar thickens the Infusion of Galis.  
t . yjj.. ..

.'..--DIME-WATER; . ;E

It is not necessary to repeat here what we have already said  
concerning Lime-water: We will only remark, - λ .

I. That it hecomes Very white, when mixed with Oil of  
Tartar ; it makes a Very thick Coagulum, which seems to indi-  
cate some Acid in Lime. :

2. Mixed with the corrosive Acids,, it becomes more clear;  
the same also when mixed with distilled Vinegar, λ .

3. Mixed with the urinous Spirit of Sal Ammoniac, it turns  
white. - -

4. Mixed with a strong Insusion Of Galls, it becomes thick,  
greyish, approaching to brown *s* and one may observe upon its  
Surface a black Spot, like a Drop of Ink: Thus Lime-water  
seems to have something of Vitriol.

: s’- -- 'se . vnL . ; ; .

- - E A R T H. s - v

One may see by all these Experiments, whet Affinity there  
is hetween the natural Salt of the Earth, and the other Salts  
whereof we have been speaking; but moreover that of the  
.Earth is wrapped up with a great deal of Sulphur.

The mineral Sulphur, Bitumens, Pit-coal, Jett, and Petro-  
leum, prove, that the Earth is not without a natural Sul-  
phur. . : '

By the Chymical Analysis the pure Earth, without Dung or  
Rubbish, yields a seetid Ost, and.an urinous Spirit; the Re-  
mainder, winch you draw, participates more of Alcali than  
Acid.

Garden Mould, well dried and sifted, gives Spirit of Wine a  
lemon Colour, after five or fix Days Infusion upon warm  
Ashes. '

. I. This Spirit of Wine does not presently change the Colour  
of Solution of Turnsole; but soon alter it precipitates, and the  
Remainder becomes grideline. Common Spirit makes the same  
Precipitation, but the Liquor remains blue. - '

2. It becomes prelry white and thick by the Mixture of  
Water ; hut some time after it hecomes grumous, and precipi-  
tates in form of a yellowish Refin; all winch does not happen  
to the common Spirit of Wine.

.. 3. It becomes Very white with Solution of Sublimate, and  
grows warm; this Solution, mixed with common Spirit os  
**Wine,** grows warin also, but the Whole remains clear.

.4. It whitens likewise by the Mixture of Lime-water, and  
precipitates a resinous Matter. .

**5.** It mixes but very indifferently with Oil of Tartan; and  
after there two Liquors have been well shaken together, they  
become thick. .. .......

6. It occasions no Change with urinous Spirit of Sal Ammo-  
niac, nor with the corrosive Spirits, except that it heats them  
**a** little; but thet ;is the seme with the common Spirit of  
Wine. ' ’

\*‘2. It grows hot with Lime-water, and hinders Its turning  
yellow with corrosive Sublimate; these Liquors make just fuch  
a dirty White, as you may observe when you mix Urine with  
Lime-water, Sod .add Sublimate, to it; The common'Spirit of  
wine grows hot also with Lime-water, but the Whole be-  
comesp. Red-oiange, when you pour on the Solution of Subli-  
mate. ' ' ‘""ἐν' - d , :-

1 These Experiments shew, that there is a Sulphur, an alcaline  
Salt, and Sal Ammoniac in Earth; . Sulphur info'appears in the  
Extracti'that remains after Evaporation of the Infissions of  
Earth ; for this Extracti makes a kind of Soap; very thick,  
when mixed with Oil of Tartar..' " si. ' ‘ .

After ass these Experiments, we have made no great Diffi-  
culty; *first,* to compare to Sal Ammoniac, those Salts of Plants,  
which, by a Mixture of Oil of Tartar, or Lime-water, emit  
in urinous Spirit ; and which; by Chymical'AnalysiS, predace  
also a volatile crystallized Salt; for it is probable, thaf the vo-  
latile Salt is nothing but the urinous Part of the Sal Ammo-,  
niac of the Plant, which leaves its acid Parts by Force of Fine:  
Thus, by the Mixture of Oil of Tartar, or Lime-water, the  
urinous Spirits appear to be nothing but part of the feme vola-  
tile Salt disiolved in Phlegm, and the foetid Oil is as much  
loaded with the same Salt. We must not therefore wonder,  
that there Sorts of Plants are aperitive, detersive, febrifugous,,  
vulnerary, and.the llke; for Sal Ammoniac.-has all these Qua-  
lities. -) ...... ' . ' - - - - --

It is proper to observe, thet although Sal Ammoniac seems  
to be but in very fmall Quantity in Infusions of Earth, yet it  
is very considerable ; for the urinous Spirit, which by the Mix-  
ture of Oil of Tartar separates itself from there Infusions, is  
. only a Part of the Sal Ammoniac ; and the white Colour which  
the fame Infusion gave to the Dme-water and corrosive Subli-  
mate; denotes thet this Part is very considerable. On the other  
stand, this Salt is insensibly gathering several Days in Plants *s*and. the Quantity of volatile Salt, which is obtained from four  
or five Pounds of a Plant, is commonly only from half.a Dram  
to six Drains. Of all the Parts of Plants, the Leaves are most  
fit to he loaded with Sal Ammoniac; for the Roots, Flowers,,  
and Fruit-, retain more properly Acids. The Oil is commonly  
distributed in the Seeds, and the Phiegm diffuses itself through  
the whole Plant. \ - -

*2.* Alum feems the most proper to explain the Virtue of such  
Plants as are styptic, astringent, and which, by Chemical Ana-  
lysis, afford a great deal of Acid, and much Earth ; for these  
two Parts must make a Salt analogous to Alum. There are a  
great many of these Sorts of Plants, which also afford a little  
urinous Spirit; and this seems to denote, thet besides the Alum,  
there is some Sal Ammoniac in their Composition.

3. Those which are aperitive, and from which a great deal  
of Acid and Earth is drawn, have perhaps a Salt not much dif-  
sereut from that of Coral. ...

4. It is supposed, thet the Plants which, besides the Acid-  
and Earth, yield alcaline Liquors, or Signs of Sal Alcali, tio  
contain a Salt like to *Tartarus Vitriolatus,* or to thet Preparation1of Salt of Tartar, which *Mullerus* and *Sersnertus* have called  
*Terra foliata Tartari,* or *Tartarum foliatum.* Sometimes we  
have compared the Salt of these Plants to thet which *Angelas  
Sala* has named *Oxyfal Diaphoreticum .,* but all these Salts, in  
the fame manner as *Sal Ammoniac,* are modified in Plants by  
different Portions of Sulphur and Phiegm. See **TARTARUS  
VITRI0LATUS, TARTAKUs REGENERATUS, and OXYSAL  
DIAPHORETICUM.**

5. It is probable, that in aromatic Plants, as several skilful  
Persons have proposed, there is something llke thet Chemical  
Preparation, which is called the volatile, aromatic, oily Salt;

/ or oily, volatile, aromatic Spirit ; for bosh of them are drawn  
at the same time. See AMMoNiAcUM.

' We commonly draw less concrete volatile Salt from these  
Sorts of Plants, than the others. It seems that Sal Ammoniac  
dissolves itself in their Texture ; and then the urinous Part be-  
ing separated from the Acid, and unitiog itself to the essential  
oily Parts, that little which remains of the concrete urinous Salt  
insensibly evaporates. *Martyn's Tournofore.*

ANA-MALLU. TheName of a leguminous Shrub, which  
grows in the *Brasses.* The Natives make use of the Thoms of  
this Plant, after taking off the Bark, to bore their Ears with.  
They also make a Decoction of the Leaves, in Water wherein  
Rice has been washed, or in Whey, which they ufe by way of  
Bath, in cafe of an Intumescence of the Belly, either from  
Wind or extravafated Lymph. It is taken Notice of in the  
*Hortus 'Malabarioes. -*

ANAM1X, ἀναμἱξ, an Adverb used hy *Hippocrates* to ex-  
press *prsmifcuousty,* or-the mining Ingredients together.

ANAMNESIS, a Recollection, or Remembrance.

Hence ANAMNSSTICA SIGNA, commemorative Signs;  
that is. Signs by which we disoover She -preceding State of the  
Body ; as demonstrative Signs are thesewhich shew the present,  
and prognostic Signs those which shew the-suture State. It is  
derived from the *Greek* Preposition ἀνἀ, and μέμνημαι, to re-  
member. -

*. Blancard* explains ANAMNEsTIdA, Remedies which restore  
the Memory. ''T

ANANAS, She Pine-apple:

The Characters are; *. c . -*

.. It hatha Flower consisting of one Leaf, which is divided into  
three Parts, and is Funnel-shaped ; the Embryo’s are produced  
in the Tubercles ; these-afterwards become a fleshy Fruit, full  
of Juice, the Seeds, which, are lodged intheTubercles, are very  
small, anil almost Kidney-shaped::

The Species are, . ... . . ’

ς I. *Ananas aculeatus, fructu madia, came albida.* Plum.  
OVAL-SHAPED PINE-APPLE, WITH A WHITISH  
FLESH. .- - ‘ .

2. *Ancrnas aculeatus, fructu pyramidato, came aurea.* Plum.  
PYRAMIDAL PINE-APPLE, WITH A YELLOW  
FLESH.

3. *Ananas folio via ferrato-,* Boerh. Ind. Alt. a. 83. PINE-  
APPLE, WITH SMOOTH LEAVES.

*4. Ananas lucidevirens, foliamix serrato,* Hcrt.Elth. PINE-  
APPLE WITH SHINING GREEN LEAVES, AND  
SCARCE ANY SPINES ON THEIR EDGES.

- 5. - *Ananas aculeatus, fructu pyramidato virescente, carne a urea.*THE GREEN PINE-APPLE, WITH A PYRAMIDAL  
FRUIT, COMMONLY CALLED THE SUGAR-  
LOAF-ΡΙΝΕ IN *BARBADOSS.- - -*

- ’.6s *Ananas fructu ovato ex luteo virescente, cerne lutea.* THE  
'OLIVE-COLQURED PINE. .. .

- - The first Sort is the most common in *Eurppo -,* but the second  
Sort is much preferable to it, the Fruit of this being larger, and  
much better flavoured ; the juice of this Sort is not so astrin-  
gent as is thet of the first, *so* that this Fruit may be eaten in  
great Quantity, with less Danger. This Sort generally pro-  
duces six or seven Suckers, immediately under the Emit, where-  
by it may he in creased much faster than the common Sort; so  
that, in a sew Years, it may be the most common Sort in *Eng.*land. ' - . .. .

Tine third Sort is preserved by some curious Persons, for  
the sake os Variety ; but the Emit is nut near so good as either  
of the former. - - - - . ..

. The fifth Sort is, at present, the most rare in *Eurppo*; there  
being very few of the Plants at present: This is esteemed the  
best Sort, yet known, by some of the most curious Persons in  
*America,* who have thrown out all the other Sorts from their  
Gardens, and cultivate only this Kind. The Plants of this Sort  
may be procured from *Barbadees* and *Montserrat,* in both which  
Pisces it is cultivated. The sixth Sort was brought from *J a.  
rnaica*; this, is not very common in *England* as yet; it is esteem’d  
a very good-flavoufd Fruit, by those who heve tasted it; but it  
being a very backward Sort, will render it less valuable in our  
Climate; for this Sort will require a Month longer time to ripen,  
from the first Appearance of the Fruit to its Maturity, than  
most of the other Sorts. I have allo heard of another kind of  
Pine, whose Flesh is very green, and the Outside yellow; but  
having never seen the Sort, I cannot give any Account of it.  
There are many other Kinds to he sound in the several Coun-  
tries where they are cultivated, which have arisen from Seeds,  
which differ in their Shape, Colour, and the Flavour of their  
Fruit ; so thet as these Fruits become common in *Europe,* all  
the bad Sorts should be rejected, and such only as produce sine  
Emit should be cultivated, -

This Fruit, which is justly esteemed for the Richness of its  
Flavour, (as it surpasses all the known Fruits in the World) is  
produced from an herbaceous Plant, which heth Leaves some-  
what resembling those of an Aloe, and are, for the most part,  
saw’d on their Edges; but are much thinner, and not so juicy  
as the Aloe: The Fruit resembles the Cones of the Pine-tree,  
from whence it is supposed to heve its Name.

Where this Piant is a Native, I believe it is hard to deter-  
mine i but it was brought from the Factories in the *East-Indies,*and planted in the hottest Iflands of *ύχν. West-Indies,* where they  
are in great Plenty, and extraordinary Goodness; but it hath  
been very lately that it was introduced into the *European* Gar-  
dens, fo as to produce Fruit: The first Person who succeeded in  
this Affair, was Monsieur *Le Cour, of Leyden* in *Holland,* who,  
after A great-many Trials with little or no Success, did, at  
length, hit upon a proper Degree of Heat and Management, so  
as to produce Fruit equally as good (tho’ not so large) as those  
which are produced in the *West- Indies,* as heth been often  
affirm’d by Persons who have lived many Years there: Arid ’tis  
to this worthy Cultivator of Gardening, who did not spare any  
Pains or Expence to accomplish it, that all the Lovers thereof  
arc obliged, for introducing this King of Fruits amongst them .,  
and it was from him that onr Gardens in *England* were first fun-

plied, tho' we have since had large Quantities brought from  
*America. .*

The Time of this Fruit's ripening is, from the Beginning of  
*July* till *September*; after which time, the Fruits that ripen  
are seldom well-tasted, the Season being so sar spent, that we  
have not Heat enough to correct the Crudities, which are im-  
bibed in the long Nights, from the Vapours os the Bed, and  
them own Perspiration in the Day-time. -

The Manner os judging when they are mature, is, by the  
strong Smell they emit, like that of ripe Fruits, and by gently  
pressing the Protuberances of the Fruit with your Thumb and  
. Finger ; and is they give way, it is a certain Sign os Ripeness :

Nor will this Fruit, keep above three or sour Days at most, if  
suffered to remain on the Plant, before its high Flavour will be  
lost ; and if cut, it should not he. kept above twenty-four Hours  
at most, if you would eat it in.Perfection. *Millegis Dictio-  
nary.*

. They press out theJuice, andrmake of it an excellentWine,  
almost as strong as Malmsey, and which intoxicates.

. It is proper to fortify the Heart, and good to exhilarate the  
. Spirits when oppress'd ; it cures a Nausea, and provokes Urine;  
hut Women with Child ought to abstain from it, hecause it will  
endanger a Miscarriage.

They makes Confection of the. Ananas upon the Spot where  
it grows, which is brought hither whole : This is good to warm  
and restore a weak Constitution. *Lemery de Drogues.*

*s* ANANCE, ἀνάγκη, properly Necessity, but by *Hippocrates*it is used generally to express Force, or Violence; such as is  
used in the Distention of a disiocated Limb, in order to reduce  
**It. . . \_ .... . '**. ANANDREIS, αἐνανδρεῖς, from α Negative, and ἀνήρ, a  
Man. *Hippocrates,* in his Treatise *de Acre, Locis et Aquis,*calls certain People amongst the *Scythians* by This Name. The  
Interpreters tran flate it *Effeminate.* I have rendered *it Impo-  
tent.* - See the Pastage in the Tranflation of this Treatise, under  
**the** Article **AER. '**

ANANDROI, ἄνανδρος of the same Derivation as the  
former, tho' or a very different Signification : For *.Hippocrates*uses this, joined with γυνἀῖκες. Womens to express their never  
having known Man. ’ . ,

ANANTHOCYCLUS. This is a kind of Plant mention'd  
by Mr. *seaillant,* and by him called *Couronne essleuree.*

It takes its Name from the *GreeFW*ords αιἀ, without, ἄνθος,  
a Flower, and κύκλος, a Circle; because the Flower of this  
Sort of Plant is surrounded,.or crown’d, with one or more cir-.  
Cular Ranks of Ovaries, destitute of Fleurets. .. ..

. The Species of it are, ’ - . ' "

. I- *Ananthocyclus coronepi Chrysanthemum exoticum minus, capi-  
tulo aphyllo ; Charnameli nude facie,* Bre) n. Cent. I. Tab. 76. :. 2. *Ananthocyclus chamameli folio. An Chrysanthemum exoti-  
cum perpusillum nudum, foliis Coronopi,* Pluclc. Alm. I0X.  
Tab. 274. Fig. 6. *Memoires de P Acad. Roy ale, A.* I 719.

I can find no Virtues that are particularly attributed to this  
Plant.

ANAPALIN, ἀνάπαλιν, on the contrary, on the opposite  
Side, over-against. This Word has a direct contrary Signifi-  
cation to κατ' ιξιι, on the fame Side, and ευθυωρία. Rectitude. .

Thesis Words are very much used by *Hippocrates,* in speaking  
of the Transmutations and Fluxes os the Humours. For, in  
the Motions of Nature, he teaches us always to regard the  
έυθυωρία, " the Direction, and strait Situation of the Parts,''  
and the τὸ κατ’ ιξιν, " the Situation on the same Side." What-  
ever Symptoms happen ἀνάπαλιν, that is, on the opposite and  
contrary Side, are always judged bad. So, in an Haemorrhage,  
τάἀνάπαλιν άιμῤῥῥαγέωτα, " all Fluxes of Blood on the con-  
" trary Side,” are condemned by *Hippocrates.* And in his  
Doctrine of Abscesses, *Epid. Lib.* 2. he passes the fame Censure  
on τὰ ἐπί αί ἀναντία ῥἐποὑτα, ci those which verge to the con-  
" trary Side." But of these some are reckoned good, others  
had, from Experience rather than any Reason that can be given  
for it. In a Crisis, the Blood ought to flow from the Nostril on  
the same Side with the labouring Part; aS, sor Instance, from  
the Left Nostril when the Spleen is inflamed, and from the  
Right Nostril in an Inflammation os the Liven It is a thing so  
fully proved by lang Experience, as to be taken by Physicians  
for an undoubted Truth, that Nature struggles with more  
Vigour, and better Success, in the Passages that run directly on  
the same Side, or ἐν ευθυωρίῳ, than in those which lie ευἀπαλιν,  
*\*c on* the contrary Side,'\* where she seems aS if she acted sym-  
ptomatically, and were disabled from restraining the inordinate  
and unruly Motion of the peccant Matter, by making a Trans..  
ition from one of the Vifcera to another Part opposite to it.  
*Gorrceus.*

ANAPAUSIS, ἀνἀπαυσις, from ἀναπαύω, properly to rest  
again from Labour. It signifies Rest after Exercise or Labour,  
Ease from Pain, or Remission.

ANAPETIA, ἀναπετ«α, from άναπετάννυμι, to expand. It  
signifies an Expansion of the Passages, through which the Blond  
or Juices circulate.

. ANAPHALANTIASIS, αναφαλαντίαπς, from ἀναφάλαν-

τος, a bald Person. - Baldness, properly, of the. Eye-brows.  
*Arist ci. Hist. Animal. Lib.so Cap.* 7. : ... Ἄ

\* ANAPHONESIS, άνάφῶνιίιής,Ἀ Species of Exercise. Tf  
Consisted-in Vociferation. ... *...sis so ‘*

The suss Condition, or Quality, ascribed to Vociferation, os  
whet Kind soever, by *Antyllus, Plutarch, Paulus,' Artitis,* and  
*Avisenna,* is, that it exercises, exceedingly well, tho Bread and.  
Vocal Organs. -. *Averroes* says, that the Lungs are, properly con-  
cerned in the Exercise of the Voice; and that,the Use Os is,  
upon Occasions, increases the natural Neat, cleanses,, strength-  
ens, and attenuates, and renders the solid Parts os the Body  
robust, pure, and not liable to he injured. *. AvisennaAdds,* thee  
this Exercise improves the Complexion : Theinatural Heat is  
increased, because the Breath ism constant Motion, as well in  
inspiration as in Expiration, and suffers anAttrition and Collision,'  
by which Heat is excited. This Exercise cleanses, as it makes  
the Flesh more rare; and also, because by the Motion osethe  
Vocal Instruments the internal Humidities are oonshined'; as ss  
very evident from the thick Vapour which exhales out of the.  
Mouth in Vociferation, and the Superfluities of the stale Hu-  
mours which adhere to all the Canals, discharged as well in this  
manner as many other ways. And, lastly, - the.matural.Heat .is  
strengthen'd and attenuated ; because the Vessels are absterged,  
and many Humours, as Spit, Mucus, and. Phlegm,, are conihin'd,\*  
which, as before they obscured, debilitated, and condensed that.  
Heat; so, by their Dispersion and Evacuation, if acquires a new  
Strength and Purity, and the Solids become more firm, and less  
liable to be affected, si .. .ί / . ί . :

The Premises being granted, it stands to Reason, that VOci-  
feration becomes a noble Support to such as-have their inward:  
Parts affected with Humidity, and whose whole Constitution is  
become frigid. ' ......

For these Reasons we find it recommended by *Antyllus,  
Caelius Aurelianus,* and *Accius,* to People subject to Heart-'  
burning, frequent Vomitings, habitual acid Eructations, Indi-,  
gestion, Inappetency; to those who labour under an Atrophy,,  
orare languid, cachectic, hydropic, asthmatic, consumptive;  
to Persons affected with Pains in the Thorax, or Diaphragm, or  
Abscesses in the Thorax; to pregnant Women, or those that  
labour under a Pica, tiiat is, an inordinate Appetite sor incon-  
gruous Food ; and *Alexander* says it is good for Women in La-'  
hour, as it promotes Delivery : It is sarther recommended by  
the above-quoted Authors, sor Quartans, pituitous. Disorders,  
and for People on the Recovery from almost any Disorder.

I must remark here, that there is scarce any Vulgar Custom,.  
let it seem never so trifling, but what may be found recom-  
mended by one or other of the antient Medicinal Authors..  
TheAdvice os *Alexander,* above-quoted, is followed by almost:,  
all the common Midwives in the World, who advise frequent  
Vociferation to the Women in Labour, under their Care, arid  
it seems not unlikely to have a very good Effect;

*Galen,* 8. *de Mede Local. Cap. An* recommends Uncti-  
ons, Exercises, and Vociferation, applied by an experienced  
Artist, sor Pains in the Stomach. It is the Judgment os that  
anticnt and most excellent Physician *Aretaus,* that Vociferation  
is an excellent Exercise, not only in Leprous Cases, but also in  
theCceliac Passion.

*Aetius* was os Opinion, that Vociferation was os Service in  
Hoarsenesses, occasioned by. superfluous Humidity, in Resolu-  
tionS os the Organs os Voice, and a Cachexy ; and is the Voice  
is affected by some Distemper, or becomes spontaneoufly bad,  
*Antyllus* advises this Exercise. But as the Voice itself receives  
Injury not only from too long continued, or too loud Talking,  
but also from too much Silence, whereby the Organs *os* Voice  
forget, as it were, their Functions by Disuse ;\_in both these Cases  
the proper Exercise os the Voice may be os Service; sor, by  
this, the Defects contracted by too. long and loud Talking, may  
be moderated ; and a Shriiness in the Tone of Voice may be  
remedied by an Intermixture of deeper Notes ; and the Exer-  
oise of the Voice may be rationally supposed to mend Defects  
thereof, caused by too much Silence, and the Difuse of **the**Organs subservient thereto.

*Hippocrates* asserts, that the Exercise of the Voice, after Sup-  
per, is beneficial in Cases where the Flesh has been wasted by  
too strong Labour and Exercise.

It is however to he remark'd, that Vociferation is not accom-  
modated to Disorders of tlie Head, because it has a Faculty of  
filling the Head with Humours, and thereby affecting the Organs  
of Sense contained therein. - :

Hence it is, that *Caelius Aurelianus,* approving of it for the  
Epilepsy, in the Declension of the Disease, prudentiy adds,  
" provided the Patient can bear it." For the Violent Vocise-  
ration, which sometimes is call’d ἀναήδησις, by*Aretaus plavetatim,*is said by *Hippocrates* to afflict (λυπέβν) ; besides that, it filis  
the Head, and renders it more heavy, as *Aretaus* and *Galen* testi-  
fy : It is also in an extraordinary manner, according to his Opi-  
nion, pernicious to the Voice, and also makes the Veins burst:  
And *Caelius,* for the same Reason, disapproves Exclamation for.  
Persons affected with the Epilepsy, as too violently straining the  
Parts affected; and *Pliny* the younger, with Justice, com-:

plainedthaf ZsiofuspldinFreed-rnan, whilst he studied the Recoa  
Very of his Voice, fell into a fresh Haemorrhage, after the Ves-  
sel, which used to discharge the Blood, had been stopp'd... *Are-  
tceus,* however, advises it in stomachic Disorders; and *Aetius*for suppressing the Hickup : But it is observable, that almost all  
Authors remark; that Vociferations were never rashly or unada  
yisedly to be used, especially by such Persons who commence,  
.whilst they are unacquainted with this Exercise; nor ought any  
Person to use it who abounds with bad and corrupt Humours :  
Moreover, "the Voice in not Io be exercised, if. the Stomach is  
disordered with many and mans fest Crudities, lest by the A ction  
of Inspiration and Expiration,, which becomes more strong and  
quick, whilst the Voice is increased, both with respect to Fre-  
quency andLoudjness, Ihe Corrupt Vapours he. more widely dif-  
‘tributed through the Body: Wherefore it was the Advice of  
μ/Γς?ἰιεαφαο exerciseche Voice gently, and to, utter’deep Sounds;  
because shrill Notes occasion Distentions of the Head, Palpita-  
Lions, at the Temples, Pulsations of the Brain, Strainings of the  
Eyes, and Ringing of the Ears ; hut the Voice, gently used,  
does Good to the Head. We must beware also of Vociferation  
after Meals, because thy these the Voice is very much disorder'd:  
Whence *Aristotle* advised Actors, Singers, and others of such  
Professions, to exercise sqeir Voices with an. empty Stomach ;  
otherwise the Breath, being heated, as well by the undigested  
Food, as hy their Exclamations, exulcerates the Aspera Arteria  
assit passas thro' it, and so the Voice is spoiled : In short, we  
must take care, according to *Plutarch's* Opinion, thet no one,  
conscious os a Plenitude, or os immoderate Lust, or Fatigue,  
strains his Voice, Itor uses too Violent Vociferations, .and  
brawling Clamours ; since such unequal Strainings, of the

. Voice, and Violence, produce Ruptures of the Vessels,-and  
Convulsions. ’ , - . mi...

... Next to *vociferation succeeds Singing,* differing, from it in’  
this,. that it consists in a certain Harmony, nor is it perform’d  
with so much straining of the Voice; for which Reason, besides  
Other Advantages, it is productive of a certain Pleasure, which  
Vociferation has not. For *Alexander* writes, " That Porters,  
" if they sing, feel their Burden the less, ” because the Mind,  
soothed with the Notes and Harmony of Numbers, is insensible  
of the Weight, and so hecomes less affected.. For similar  
Reasons the Antients generally made use of Pipes and ’ Music  
for Persons mourning, and otherwise disturbed (which *Ari-  
stotle* also acknowledged) ; and it was customary to have Men  
assembled and talk os indifferent Subjects to such as were  
grieved at the Death Of their Relations, arid mourned : Since  
the Mind, when it turns itself to talking, is less affected with  
Grief; which the Antients well understanding, invented differ-  
ent Scenes of Diversions, in order to divert the Mind, and  
disengage it from the Subject of. Grief, sometimes with one,  
sometimes with another Entertainment. With respect to Sing-

. ing or Vociferation with Harmony, *Antyllui, Aetius,* and *Paulus*are of Opinion, that it contributes nothing to Health :.But I  
find it sometimes apply'd in Distempers ; for *Caelius Aurelianus*writes, that the Exercise of the Voice composed in a musical  
Strain was found useful for mad People in the Decline of their

- Disorder.

. Besides, *Aulus Gellius* relates, that he found it written by  
*Theophrastus* and *Democritus,* that playing upon Pipes, and  
Singing, cured the Bites of Vipers and of Men ; and moreover,  
it was believed, and has been handed down to Posterity, thet  
such aS have the Sciatica, when in the Violence of their Pain,  
if they themselves, or a Musician plays, soft Music, (which we  
read to be the constant Practice of *Isinenius* the *Theban),* their  
Pain was abated, as the Brother of *Philistion* has also acknow-  
ledged. This kind of Remedy some have thought to be the  
Invention of *Pythagoras* : Tho' *Soranus,* who is Author os.  
those three Books concerning acute Distempers, tranflated into  
Latin by *Caelius Aurelianus,* reflecting upon *Asclepiades,* who  
profess'd to cure phrentic Patients by Singing, Veryjustly said,  
" That they are possessed with a strange conceited Opinion,  
" who believed that Excess os Pain can be removed by playing  
" on Music or Singing. '' Is therefore Singing conduces little  
towards the Preservation of Health,, and the Sound of deeper  
Notes is useful. Persons studious, of their Health ought rather  
to study Vociferation than Singing : Because a Quantity of Ain  
thus attracted distends the Thorax, opens or .dilates the Belly,  
and all the Passages dispersed tino' the whole Body ; when in  
Singing there can only a more useless Amusement he found,  
more fit to render robust Bodies effeminate, than to preserve or  
strengthen them. Whence I have often admired why *Socrates  
(as Plutarch* relates) us'd to exercise himself with Singing, and  
not with Vociferations, since by these, and by reading fast,  
the Excretions of redundant Humours are promoted; and those  
who read faster are more affected , and principally by Sweats,  
whilst those who read more leisurely, and less loud, are reliev’d  
by means of insensible Perspiration. Nevertheless, we ought  
always to remember the saying of *Avisenna,* Thet it is dan-  
gerous to strain the Voice a long time, and that, from Exercises  
Of the Voice, Herniae and Rupturos of the Vesseis are often  
caused. *Hieron. Mercurialis de Ante Gymnastica.*

- ANAPHORA, ἀναφορά, from ἀναφίρω, th bring up, or up-  
wards—In A Medicinal Sense it imports a Spitting-os’Blood,  
if join'd with ἄιματος. But *Hippocrates,* in his Treatise de  
*Arte,* uses it to express an Obligation, or Thanks due for an  
Obligation. Hence, 2. ’ ... -

ANAPHORICO!, ἀναφορικοἰ, those who spit Blood; or, ac-  
cording. to.:*Actuarius,-* those who expectorate, with Difficulty.  
The Word in itself, according to Etymology, seems to signify  
no other than those who cast or throw up any tlnng from the  
lower Parts;. *Diofcorides, Lib. de Materia Medica,* as he  
is tranflated by *Cornarius,* seems to understand by it those who  
throw up Blood from the lower-Parts at the Mouth. But  
*Marcellus Virgil.,* restrains the Word, in the Place hefore cited,  
to a painful, and difficult throwing up, or Vomitings; wherein .  
he follows *P. AEgineta,* who. *Lib.* 3. Cap. 28. of the Affec-  
tions of the. Arteries, as *Goupylus* renders him, seems barely to  
understand those who expectorate -with Pain and Difficulty.  
And , indeed, the *Greeks* by these Words ἀναγωγιἔί άνάπτυσις,  
ἀναφορα?, when put. absolutely, without any Addition, -usually  
mean not so much a bringing up of Blood,-as of any other  
Humour, or Collection of purulent Matter contained in the  
Breast or. Lungs, .which are to be evacuated by the Mouth; so  
that those wham.. *Diofcorides,. Lib.*2. τῶν. ἐυπορ. and every-  
where in his Boole *de Materia Medica,* calls ἀναφοριν.οἰ-, are by  
*Hermolaus Barbarus* rightly tranflated " such as bring up cor-  
ea rupt Matter, where he has, taken - the Author’s Sense  
much better *than.Cornarius.si- s:*-nJ am, however, aware,"that-most.-Authors use-this Word  
to .signify such, as spit Blood, ὑ *Serapion* restrain'd its Meaning  
to an Expectoration of Sanies ; but to this Word most added  
ἄιματος. How great the Differences are between Hremoptoici,  
or Snifters of Blood, and Anaphorici, appears froth the differ-  
ent Remedies which they require. *Gorraus.- -*

ANAPHRA, ἄναφρα, from-.orNegative, and ἀφρός, Froth.  
It is used by *Hippocrates* as an Epithet to *Stools,* in order to  
express their being *not Frothfo ss ... . ....*

ANAPHRODISIA, ἀναφροδισία, from α Negative, -and  
ἀφροδισία, Venery. Impotence with respect to venereal Com-  
merce. . - . .- - . / . . ‘  
.. ANAPHROMELI, from α Negative, ἀφράς, Froth, -and  
μέλι. Honey. Despumated Honey, or Honey boil'd till it will  
no longer .froth. *Llancard. J"-*

ANAPLASIS, ,ἀνάπλασις, from ἀναπλευσω, to restore to  
the original Form. *Hippocrates sum* his Treatise *de Ofsicena.  
Medici,* uses this Word to express the replacing a fractur'd  
Bone in the same Situation it . obtain'd before-it was broken-  
in the same Treatise also, it signifies a Restoration or Renu-  
trition of the extenuated Flesh. ’ ....

ANAPLEROSIsq. ἀναπλήρωσις. Repletion in general.-But  
it also signifies, that Part of Surgery , which is concern'd in  
restoring Deficiencies, and in this Sense is the same as PROS-  
THESIS, which fee. Hence, ANAPLEROTICA are Applica-  
tions which encourage the Growth Of Flesh in Wounds or  
Ulcers.- IncarnatiVes.

ANAPLEUSIS, ἀνάπλευσις, from ἀναπλἐω, to fluctuate,  
or float upon. *Hippocrates* sometimes uses this Word to ex-  
press the Redundance of Humours fixing on a Bone, which  
makes it rot, exfoliate, and fall Off, as is sometimes the Case  
of the Bones of the Jaws.

ANAPNEUSIS,. ἀνἀπνευσις, . from- ἀναπνέω, to respire.  
Respiration. But *Aretaeus* uses it to express *a Truce* from  
*Painas Homer* uses it also to express *co Truce* from *War.* It  
signifies also *T.ransipiration.*

ANAPODOPHYLLON, *sei Anas,* a Duck, *eund,* a Foot,  
and φύλλον, a Leaf). Duck’s-soot, or *Pomum Maiale, Nsaj*Apple. a " . '

The Characters are ; ἐν. ....

.. The Cup of the Flower consists of one Leaf S The Flowers  
are hexapetalous. The Foot-stalk of the Flower comes out  
from the Stalk of the Leaf. The Fruit is in the Shape  
of an Urn, in which are contained many roundish fimbriated  
Seeds. . -

This Plant was brought from *America,* and is by some of  
the Inhabitants called Black Snake-root, and by others the  
May Apple ; I suppose, because in that Month the Fruit of  
this Plant, is nearly ripe, and is of an oval Shape, in some  
measure resembling a small Apple. We have but one  
Species of this Plant in *England,* which is the *Anapodophyl-  
lon, Canadense Morini.* Tourn.

This Plant: is Very hardy, enduring our sharpest Winters in  
the open Ground : It is increased by parting the Roots in  
*August,* after the green Leaves decay r It loves a moderate  
SoH, and for the Oddness, *of the* Plant, may merit 2 Place in.  
a good Garden, although it. is of. no great Beauty nor Use.  
*Millar's Dict.* Vol. I. ....

ANAPSYXIS, ἀνάψυξις,- Refrigeration.

ANARISTESIS, αναριστηοςς, from α negative, and ἄριστον, a  
Dinner. *Hippocrates,* in his Treatise *de Insomniis,* uses this  
Word to express the Subtraction os Dinner from a Patient.

ANARRHOEA, ἀνάῤῥοια, from ἀνἀ, upwards, and ῥέω,  
to stow. A Flux of Humours, tending from the inferior Parts,  
upwards. *Castellus* from *Schneider, de Catarrho.*

ANARRHOPLA, ἀνἀρῥοπία, from ἀνὰ, upwards, and *farce,*to verge. A Tendency of the Humours to Verge or incline  
Upwards, or towards the superior Parts ; 25 καταῤῥσπίη is a  
Tendency os the Humours to the inferior Parts. . See CA-  
**TARRHOPIA. ; . . .. . ... „ .**

. ANARTHROI, ἄναρθροι. *Hippocrates,* in his Treatise *de  
siere. Loces, et Aquis,* says, that a certain People amongst the  
*Scythians* are ἄναρθροι, to express their being so fet and bloated,  
that their Joints are obliterated, and not discernible. It is  
derived from α Negative, and ἄρθρον, a Joint.

i ANAS, the Duck, distinguished into theWild and the Tame.

The TaineDuck is thusnamed : ‘ \_

ANAS, .Ossie. Bellon, des Oyse. I6o. *Anas, domestica,*AldroV. deOrIiith. 3. I88. . Jons. de Aviso 95... Schrod. 5.  
3 I4. Charlt. Exer. yo4. *Anas domestica vulgaris.* Wish  
Ornish 293. Rati Ornish. 38O. EjusiL Synop. A. I50.  
*.Circursidurfa.* de AVib. 83.. THE ,DUCK UR DRAKE.

The whole Duck alive, the Fat, Blond, and Dung are used.

\_ A living Duchy stript Part of it bare of .Feathers, and ap-  
ply'd to the Belly, eases the Pain of the Colic. It in useful  
in external and internal Pains, as of the Sides, Joints, and in  
a cold Distemperature of the Nerves. The Blood is an Alexi-  
phannic, and therefore sometime used in Antidotes. The Dung  
is apply’d to the Bites of Venomous .Creatures, *Schrod. Dale.*

The Flesh of the Tame Duck is not esteem'd Very good Ali-  
ment for sedentary People, those .whese .digestive Organs are  
weak, or for such, as confine themselves to a Regimen, either on  
account of preventing Diseases, or for the Re-establishment of  
Health, because it is not Very.easily digested, nor does it afford  
verv good Juices.. 0

The Wild Duck, is thus distinguished:

- ANAS SYLVESTRIS, Ossic. Schrod. .5. 3I4. *Anas tor-  
'quata minor,* Raii Synop. A. 145. AldroV. Ornish. .3. 2I2i  
*Anas flora iorqscata- minor,* Gesn. de AVib. 99. *Anas sera,*Charlt: Exes,I04... Mer. Pin. .I8o. *Boscas major,* Jons, de  
AVib. 97. Will. Ornith. 284. Raii Onush 37I. .THE  
.WILD DUCK AND MALARD. They live in Enters.  
The. Fas,.. Blood, and Dimg are .in use. AS son the Virtues,  
they agree with those of the common Dntlt. *Dale.*

The Salts Of the Wild Duck are.much more exalted than these  
os the Tame Duck, both on account of the habitual Exercise  
and Aliment of the wild Species, for these live much on Fish  
and aquatic Insects, The Wild Duck therefore must be a pro-  
per Aliment, when an Acescence prevails in the Stomach and  
Intestines, or in the Juices; but the contrary, where there is  
any Tendency to an alcaline Putrefaction.

*Lemery,* in his Treatise on Aliments, makes the following  
Observations on Ducks.

' . There are two Sorts os Ducks, the Taino and the Wild  
Duck,; the last of which has brown.and reddish Flesh, more  
valued for the Goodness of its Taste than that of the Tame  
Duck. Whether you make Choice of the one or the other,  
you are to pitch upon those that are tender, young, sat, fed  
with good Food, find bred in a pure and serene Ain.

Duck, in nourishing enough, and is a Food that is solid and  
durable. Some Authors think, that the eating of it puts a  
good Colour into the Fade, and makes the Voice pleasant and  
agreeable. . \* .

The Duck, and especially the Tame one, is hard of Digestion,  
and breeds dull and gross Humours. . .so  
The Tame Duck contains much Oil; Volatile Salt, and  
Phlegm ; and the Wild, ones have .more Volatile Salt than the  
other, but less Phlegm. .- - . . . - .

Both the one and the other *agree,-in* hold Weather, with  
young hail People, who are used to inuch Exercsse, and have a  
good Appetite. '. ιἄκ 'si-grsu

REMARK SE

A Duck is an amphibious Animal ; for she lives by Land  
and Water; The Tame one is not so well tasted, nor  
so wholsorpe as the Wild Duck ; and the Reason is, be-  
cause she has not near so much Motion, and consequently  
abounds with dull, viscous, and gross Humours. More-  
over, the Tame Duck lives among Mire, and feeds  
. upon filthy things, such as Mine and Ordure, dead and  
rotten Fish, Frogs and Toads ; whereas the Wild ones live-  
upon Foods which they seek for eVery-where : They have  
also a freer Transpiraration, by reason of the Exercise thesi  
: have, which helps to attenuate and drive out the gross  
. Humours they may heve in them, and, lastly, more and  
.more to exalt the Principles of their Fluids, and for that  
reason they abound more with Volatile Salt, than the Tame.  
ones do. .

The Goose and Duck are much like one another in respect  
to the Substance of their Flesh, and very near produce the  
same .Effects. The Wing of a Duck, as well as that of a  
Goose, is excellent Food ; and *Martialg* by rhe following

- Dines, shows what were the PartSos a Duck most m Esteem,  
for the Goodnessos their Taster - . -

*Tota mihi ponatur anas, fed pectore tantum /*

*Ep cervice fapity catcra redde fequo.* ... τ

The Tame Duck raises itself -but- a littie *from* the Earth,  
and walks (lowly, because she is Very, heavy ; thnt in lieu  
of that, she swims-Very easily,- and' fast, and can *for* a long  
time held her Head, and the rest of her Body, under Water,  
either to seek sor somewhat to eas,: or to conceal herself ,:The Liver of a Duck, hesides that it hath a Very good Relish,  
is also to he looked upon to be good for stopping the Flow-  
ing of the Liver.’ ... . .. *.i -etc - . -* στ\*ι—

The Fat of a Duck isos a mollifying, diflolving, andfofrening  
. Nature. ... -ι : ἐν υά; rr

They open the Body Of 4 Duck,-and opply at warm her the .  
.-Belly in the Wind ColicA- -l ny'-o.o - v '.' ...υιΐ υἱλ- .  
There are several sorts of Wild Ducks, that differ from one  
. .another in Bigness, Form, Cry, and Colour. . There are  
: some of thi^n -which fly flow, and others Very swiftly t  
: However, we may say in general, that Wild Ducks', sor the  
most part, fly faster than Tame ones : - They usually live  
- where there are Rivers, Marshes andTinkes. /δ᾽- -

ANASARCA, ἀνασάρκα, or,-as it am-sometimes wrote in  
two Words, ἀνά σάρκα, in the Flesh. '?» so νώ ' -  
. A Species of Dropsy, wherein the Flesh .appears puff’d up  
and swell’d, and yields to the Impression of the Fingers like  
Dough. See HYDROPs. ’. r .: SO Y .... '' - ;

ANASPASIS, ἀι άσιυασις, from ἀνἀ,-and-σπάω, to draw,  
*Hippocrates,* in his Treatise *de Prism Medicina*,uses thiSWord to  
express the Contraction of the Stomach. He says, *Thofe Stomachs  
dogost much siowcr, aud want a greater Degree of Contraction,  
avaaTdat^.,* j suppose he moans, that.the Stoinach wants ni great-  
er Degree of Elasticity and Tension ; and we know; that, when  
the Fibres Of the Stomach are relaxed. Digestion -is neither per-  
formed so speedisp, nor in any respect so well as it ought-to be. ;  
. ANASSUTOS, ἀι'πὸυτος, from ἀνὰ for ἁνμ, upwards, and  
σύω, to move. The Word is, I think, peculiar to *Hippocrates.*He uses it in his second Book *de Morbis Mulierum, AS rti* Epi-  
thet to *Air,* where speaking of a Suffocation of . the' Uterus,'  
call'd by the Moderns *Hast erics,* he says, *if the Uteri,*(in the  
Plural Number) *approaching the Heart, , cause a Suffocation,  
and the Air in Expiration is forcedcut with Violence, ard.aatJT&e.  
W* οἀὴρ βιώμενος, *the Patients perceive a great .Anxiety, and  
vomit.* In Hysteric Fits we frequentiy see a Patient labour for  
Breath, the Air being a long time in entering the Lungs during  
Inspiration, and immediately after rushing out with great Velo-  
city, so that the Inspiration is not proportion'd to the 'Expi-  
ration with respect to Tune ; something of this Rind’ happens  
in that Action of the Lungs usually call'd *sighing.* Physicians  
who have seenWomen in Hysteric Fits, will readilwiunderstand  
whet *Hippocrates* means by this, the Thing itself being the best  
Explication os the Word.

ANASTALTICA, from ἀναστέλλμ, to contract. Styptic,  
or restringent Medicines. \_ - . -

ANASTASIS, άνάστασις, from ὰνίστημι, to cause to rise. In  
the Classics this Word usually imports a Resurrection’, or the  
Removal of a Camp or People from one Place or Country to  
another. But *Hippocrates* uses it in two Senses, both some-  
whet different from these. Thefrrst is a Rising up, in order to  
go to Stool. \*The second is the Migration of Humours, when  
expell'd from one Part and oblig'd to remove to another.

It is also sometimes used to express a Rising up on the Redo-  
very from Sickness, or the Recovery itself '

ANASTOICHEIOSIS, ἀναστοιχεῖωσις, from στοιχεῖον, a  
Principle .or Element of which Bodies are composed. *Castellus*explains this very properly by Re-elementation, or a Resolution  
of the Solids and Fluids of the Body into their first Elements.  
It is principally used to express a Colliquation of the Solids or  
Hinds, when in a morbid State, in order for their Expulsion  
out of the Body.

ANASTOMOSIS, ἀνασίνμωσις, from ἀναστομόω, to relax or  
open the Mouths of the Vessels. This Word imports the  
opening of the Mouths of the Vesseis, tin order to discharge  
their contain’d Fluids. Thus the Menses, Haemorrhoids, and  
Blood from the Nose, are said to be discharg'd *par Anastomosin,*that is, by an Aperture, or Opening of the Mouths os the Vess'  
seis ; whereas, when the' Fluids contain'd in the Vessels trans-  
ude thro' the Sides, the discharge is said to *hepcr Diapedesin y*but is the Vessels have been corroded by acrimonious Humours,-  
the Evacuation is said to be *pcr Diabrostn, d'tdstplaafn,* by Exe-  
sion ; and if the Contents of a Vestel are let out by a Rupture  
thereof, it is said to he *pcr. seepplaXaaflov, Cols.us, JL.* 4. *C.* 4.

Hence ANASTOMOTICA, are aperitive Remedies, or Medi-  
cines which heve the Power of opening the Mouths of the  
Vesteis, in the Sense of *Hipsprocrates, Celsius*, and *Caelius Au-  
relianus.*

**But ANASTOMOSIS also** implies *Inosculation. ‘* Thus the  
**ANASTOMOSIS** of the Arteries and Veins, is their Inoscu-  
lations, or their Communication together, at their Extremities. '

ANATASE, ἀνἀτασις, from ἀνατεἰνω, to extend upwards.  
Or lift up. An Extension of the Body upwards. It is opposed  
I» Catatasis, which is an Extension of the Body downwards.  
*Galen. .*

ANATES, a Disease of the Anus. *Castellus* from *Lauren-  
bcrgius. se.-et .* t ἀ.

ANATHLASIS; ανάθλασις, from μαἀ and θλἀω, to con-  
tuse, or break. *Erotian* explains,this by ἔκθλιψις. Expressioni  
. ANATHREPSIS, ἀνάθρεψις, from άρατρῥαω, to renourish,  
or reconvey Nourishment Io Bodies wasted by Sickness. Re-  
.nutrition.

ANATIIRON, a sort os Salt, which Vegetates upon Rocks,  
in the Form;; os a white stony Moss. It is a sort os Nitre.  
*Johnson.,-.. „ - . ...'et: .... s .si ..*

- ANATHYMIASIS, άναὑυμἲασις, from θυμιἀω, to fumi-  
gate.. Jt signifies Evaporation...... . . \_ . . -

. ANATICA PROPORTIO, from *'Ana.* See A, and ANA.  
Anatio Proportion, stt implies equal Parts.

.. ANATOME, ἀνάτομὴ, from ἀνατέμνω, to diflect. Anatomy.  
.The Sect among the antient Physicians, called *Rasionalists,*held it necessary for a Professor of the Art of Medicine, to be  
.acquainted with the interior Parts of the human Body. For  
.since many Pains and Diseases are incident, to these inner Regs-  
.ons, how shall a Person, fay they, administer-Remedies well  
adapted to those Parts of which he has no Notion ? It is necese

. .sary therefore to dissect dead -Bodies, and to inspect and search  
into the:Viscera and Intestines.*soHeroschilus* and *Erasistratus*were very much In the right, in receiving Malefactors presented  
-thy their Kings, and cutting them up alive, that they might have  
.an Opportunity,, while there was yet Breath remaining, os con-  
shsering those things which Nature had before looked up and

. concealed,[- and..of.examining their Situation, Colour, Figure,  
.Magnitude,. Orders Hardness, Softness, Smoothness, and  
Roughness, these Situation, and then Connections and Com-  
\municatiohS with each other;. Tor suppose an inward Pain,  
show shall a Physician know the affected Part, if he he ignorant  
where any one of the Intestines or Viscera lies? And how can  
the diseased Part he cured by one who does not know what it is ?  
And when the Viscera happen.ro he laid open by a Wound,  
.one who never few the Colour os a sound Part, cannot know  
rthe sound from, the corrupted, and consequently must be incav.  
pable of applying a Remedy to what is corrupted. .Besides,  
- the Knowledge of the Figure, Situation, and Magnitude of the  
interior Parts, renders aPerfon better qualified for the Appli-  
.cation of external Remedies. Nor can it be deemed Cruelty,  
spy the Punishment of Malefactors, and but a sew of them  
neither, to search Out Remedies for innocent Persons in all fu-  
IureAgeS.^ ~ς. \ ; - .

On. rhe Contrary, they who called themselves ἐμπειρικοἰ,  
*N* Empirics, " from their experimental Knowledge, maintain-  
ed, that it. was not only unnecessary, like many other things  
insisted on by the Rationalists,, but also great Cruelty, to out  
open the Breasts and Bellies of living Men, and th turn that Art  
which professes the Guardianship of human Health, to the De-  
struction os Individuals, find that in the most barbarous manner  
.that can be devised; especially when the things which are in-  
quired after by such Violent means, are, some of them, impossi-  
ble to be known at all, find others may be known without such  
Barbarity; For as to the Colour, Smoothness, Softness,  
Hardness, arid all such-like Qualities, they are quite different  
in a dissected, from what they were in an entire Body. Even  
.while Bodies remain nntouchju, these Properties often suffer  
- Alterations; by Fear,' Pain, Hunger, Indigestion, Weariness,  
and a thousand other, less violent Affections. How much more  
probable then is st, that the interior Parts, which have a greater  
Degree of Softness, and which are Strangers even to the Light,  
should undergo a Change from such desperate Wounds, and  
.downright Murder ? Nor. can we do more absurdly than th  
imagine any thing in a Man to he just the fame whilst he is  
alive, as it is when he is expiring, or even dead. For eVeh  
the Belly,- though it may contain Air, cannot be divided with-  
out immediate Death; but as soon as the Knife comes to the  
Region of the Heart, and the *Septum Iranfversum,* which by  
a certain Membrane, called by the *Greais* the *Diaphragm, se-*parates the upper Parts from the lower, is divided, the Man  
loses his Lise that Very Moment, and so the butcherly Physician  
Comes to heve a sull Prospect osqthe Heart and its Appearances,  
’ with all the Viscera of a dead Man, which can be no other than  
such as belong Io, the dead Map, and nut such as were be-  
longing to the living Man. So that all tho Physician .gains, is  
harbaroufly to commit Murder, without bring the wiser ‘with  
respect to the State of the Viscera during Lifer However,  
If there be any thing of this Nature thet can' he the Ob-  
ject os our Sight, while the Breath is in the Pody, Chance  
often subjects the same to our View, when we attend the Sink.  
Sometimes, for Instance,*, R* Gladiator in the public Shews, a.  
Soldier in a Battie, or a Traveller fallen among Thieves, re-  
ceive such Wounds as lay open the interior Parts, some one  
Part, Tome another, where , the sagacious Physician, whose  
Mind is set on curing his Patients, not on Blood and Slaughter-,

may behold the Situation, Posture, Order, Figure, and the  
like, and attain the same Knowledge by the way of Pity and  
Compassion, which others reap from their detestable Cruelty. If .  
these Reasons be considered, even the Mangling of dead Bedies,  
which if not cruel, is at least, filthy, will appear unnecessary ;  
since most things are found in dead Carcases in a manner disser-  
tent from what they were in the living Body; and ail that can  
he known in living Bodies is evidently shewn in the Cures  
winch are made upon them. . . .

Celsos *concludes with giving his Opinion as a Moderator in these  
JPords:* To diflect the Bodies of living Persons, is both cruel  
and unnecessary.; to anatomize dead Bodies, is necessary for a  
Learner ; for he ought to know the Posture and Order of the  
.Parts, which are juetter represented in a Carcase than in a  
.wounded living Person. As to the rest, which, can only be  
.learnt in living Bodies, Practice will, tho’ by a flower, yet in a  
inore merciful way, demonstrate them in the Operations on  
wounded Persons. *Celsius in Pras.de.* . ί ἐν ;

I am sensible there have been inedeth Physicians, who, igno-  
rant of Anatomy themselves, by in Piece of Policy, not alto-  
gether free from Gitilt, have represented an Accuracy in tins  
Science aS trifling, and os no great Use towards the Cure os  
Distempers. I helieye the following Dissertation will set every  
reasonable Man right, as to the Uses os Anatomy in Medicine;  
and certainly every Man of Capacity, and a right Turn, must in  
proportion be qualisy’d to cure DistemperS, aS he understands  
‘the Structure of the internal Parts.

It must however be confess'd, that Anatomical It nowledge  
has sometimes sailed to the Share os People, who by a Misap-  
plication of it have rendered themselves worse Physicians, than  
they would , have been without in . Such are those of whom  
Doctor *Frtind* speaks, " who, though they have been'exact.

enough in the dissecting Part, yet, without any - regard to  
Nature, or right Philosophy’, are sor advancing every  
" trifling Discovery into a more trifling Hypothesis." This is,  
however, no rational Objection. to the Art itself, hut to **an**ill Use of it. . '- I ς ' ρὶ\* ...

- I must remark, that ih refuting the Argumenti against Ana-  
tomy, ih the first Part of this Dissertation, *Hioffrnan,* who is  
the Author of it, had *Stahl* in View, who was a sort of Rival  
to him, both being Profeflors in the same University, and both  
eminent for their great Knowledge in the practical,. aS well as  
theoretical Part of Physiet But *Stahl,* it seems, had some ex-  
'traordinary Notionsooneerhing Nofiire. ’ See NATURA;

*Of the Use of Anatomy in Are Practice of Medicine.*

Thofe who apply themselves to the Study of polities, are ob-  
liged to make themselves acquainted, with Geography, a Science,  
‘ highly necessary sor the Illustration and Improvement of that  
“Kind of Knowledge'. Of the same Service is Anatomy, or the  
Knowledge of the human Body, in Medicine; and he who  
enters himself in the Mysteries of this Art, well furnished with  
anatomical Knowledge, can scarcely sail of Success in his  
Practice. ’ ’ ' ...

Now, in the Study of Geography, it is not enough to know  
the Situation and Position of Places, with their Rivers and  
Mountains, but we ought to -have clear Notioris of other  
things, which principally recommend this Branch os Learning.  
We must he acquainted with the natural Genins of the Inhabit-  
ants, their Customs and Manners, in what Arts, or in what  
Branches of Commerce they principally extel; We ought to  
know farther in what the Riches os the Country consist; what  
Plants and Animals are produced in it, what are the Qualities  
of the Air and Waters; and, in-short; what Stones and Mi-  
nerals the Earth conceals within its Bowels. Whoever observes  
these things in his Study of Geography, and makes it his Busi-  
ness to attain just . Ideas of them, may reasonably expect froth  
thence no small Hein and Advancement in his political Studies.

The like Observation may he made with respect to Anatofny,  
the exact and curious Knowledge of whsch does not barely  
include the Situation of one or other of the Viscera, or the  
. Magnitude, Colour, Figure; ahd Order os the internal Parts,  
hut is of Very wide Extent. For it is necessary to inspect, with  
all our Curiosity, the peculiar Structure of each Pan, which  
' is forrned with the highest Art and Skill, to find out its Use,  
what Function it perforins in the Body, whet Connexion it  
i has with other Members; and to comprehend what Influence it  
\* has, after a wonderful manner, oh different and remote Parts.

Such a Knowledge of Anatomy is a most firm Foundation,  
four which ‘the whole Body, of Medicine may securely rest; if  
' this be removed, all rational Explications in medicinal Matters,  
’ shake and give way. Practice is in Danger, and chren Medicine  
itself salis all to Ruin. The Use of Anatomy in Surgery is so  
' undoubted, that none hut such as are little versed in the me-  
L dicinal Art, will have the Rashness to deny it. This Part of  
Medicine, in order to he rightiy and successfully exercised,  
. requires a perfect Knowledge of the external Part; for which it  
is ektreinely obliged to Anatomy, and, by means thereof, may  
' be carry’d to the highest Perfection. Perhaps it inay be doubt-  
ed by some Physicians, who employ themselves more in ex er-

cising than in studying the Art, whether Anatomy prothises  
any Advantages to us in Practice. We must declare, that we  
are wholly os Opinion, that a solid and fltilsul Physician is  
principally obliged to Anatomy for these Qualifications; and  
therefore can by no means be excused from having them. For  
the fuller Confirmation of our Assertion, especially in this Age,  
wherein the Sciences have received so much Light and Im-  
provement, we shall, in the following Dissertation, assert the  
UsefuinesS of Anatomy in Practice; in winch we shall be a  
little prolix, that we may the hetter do Justine to so noble a  
'Subjecti ..... - ...

To come immediately to the Matter in hand, we shall first  
consider the Arguments of those who are of a' different Opinion  
as to the Excellency of Anatomy, and account it of littie Use  
in practical Medicine; τ ‘These People, that they may cors-  
‘firm 'thetr'Opinion, constitute in the human Body a *Nature,* by  
which "they mean a Soul ; ’ From this Principle they suppose  
every Motion to flow, as from its first Spring-, by this,'all  
Effects produced in the Body," are disposed anthregulated, smce  
the Body is an Instrumerit merely passive, and only qualified to  
receive those Motions.. .'y " \* ‘ '/ *A . . ..* . 7

This *Nature, or* Soul, according to them, renders the Body  
sound and vigorous, guards it against Diseases, and expeis them  
'when contracted. For since *this Nature* sis "endued with an  
exact Knowledge os the Body, it iniift'act in Certain Order,  
Measure, Time, Degree, and Place,' and for Ἀ certain End,  
*so as* to be sufficient, not only for preserving the Body in Health,  
but for expelling any ITisease which may happen to insest it,  
since the most savage and illiterate Nations, who neither know  
'the Virtues os Herbs, nor are acquainted with any other Re-  
medies against Distempers,'will sometimes recover their lost  
Health by the sole Benefit of Nature. Hence they conclude,  
that the chief Duty of .a Physician is *to* acqnire the Know-  
ledge os.the Powers,. Ways, find Intentions' os *Nature,* alone,  
'neglecting the Care of the Body, because it is merely passive.  
Ln Confirmation of their'Opinion, they add, that Medicine had  
a Being, and flourished too, in former Times, when Anatomy  
and natural Philosophy were very little cultivated; and that.the  
Art of Healing, in some who lived'in those Times, surpassed the  
Ekill and Address of ourDays, though the‘Physicians os these  
Ages,'heing contented with simple Remedies, knew nothing  
of the medicinal Virtues of Metals and Minerals, nor the arthi  
ficial Preparations os Remedies. As for Anatomyin particular,  
in order to depreciate it, they add, that the most complete and  
accomplish'd Anatomist, I who Very well understood all the  
Muscles, and their Texture, would succeed no better in his At-  
tempts to cure them of any Disorder, than one of'the most  
Tuperficial Knowledge in this Part os Medicine. For it is the  
Soul which puts together tlie Parts of the Body, and is the  
Contriver of titis wonderful Structure ; and is any thing happens  
to he broken or damaged, the same Power will take care to  
restore it, and set all things sto rights, without the Help os a  
Physician.' Since therefore ’these things are all at the Disposal  
.of the. Soul,. Anatomy can be of no Advantage in practical  
.Physic. ss-ss' 'Ἀ' . ' et

’ Having .thus proposed the. Argumenta which ate brought  
against Anatomy, we are next, according'to our Method above  
declared, to Vindicate the Dignity, and extensive Usefulness of  
Anatomy by examining these Reasons, and giving a full An-  
swer to all these Objections. Here first we think ourselves  
obliged, in few Words, to explain whet is meant by *Nature*among the Antients. For our Ancestors, though, on other  
Accounts, Very wise Persons, and highly to he reverenced, both  
for their good Parts, and long Experience, yet in rational Medi-  
cine, and natural Knowledge, I won't say they were inferior  
to the Moderns, but that, for want os these Improvements,  
they took their Measures of the salutary Art, only from Effects  
and Experiments. Hence it is, that in those Times, the Art  
of Medicine was taught in a rude and imperfect manner,' be-  
cause the most noble Branches os Learning, .that of the Nature  
and Motion of Bodies, lay in a manner, buried;'and as for  
Chymistry, it was wholly unknown ; for which Reason, our  
Indulgence is due to the Simplicity of those Ages for the many  
unaccountable Stories and idle Dreams they have left us upon  
Record. They are often talking of several. Sorts of active  
Beings; they considered Matter as passive and inert; and look'd  
upon the human Body aS a mere Instrument. The Souls or  
Nature, they supposed to be an incorporeal, wise Being, endu'd  
with Reason, and Author and Governor os all the Motions of  
the Body. Having laid this Foundation, it was necessary, thet  
since the Principle was obscure and unknown, all Science and  
Demonstration should he extremely precarious. How great  
Detriment must result froth hence to the Art of Medicine, arid  
how great a Hindrance, on the other side, jt must be to the  
Improvement of the practical Part, is manifest from the Lights  
we have received in this present Age, wluoh shall be further ex-  
plained. - For when neither the Powers nor Effects of corporeal  
things, which yet act upon us aster a wondersus manner, can  
be explain'd or demonstrated from an ‘ unknown Principle,  
it easily appears in how great Darkness these Times were in-

vowed, when they were obliged, for the Solution os Phznol  
mena in Medicine, to heve recourse to an unknown *Nature*as their only Refuge. I therefore think we heve gond Reason  
to congratulate the present Age, upon account of its heing  
hless'd with a sound and rational System of Philosophy, , by  
which we are taught, that all Bodies, of whatever .Kind, are  
in a State of Action, and that Motion is no inore than the  
Excess or Difference of Action sand Force in any two given  
Bodies; for when two Bodies mutually resist each other, and  
"when the one yields to the otherdn Consequence os that.active  
Force, originally impress'd upon, and communicated to them  
by the all-powerful Author' os-Nature, then andin that Case,  
-Motion .is produced ; and,- *lvicse'versu,* V/hen the Forces of  
Action happen to prove a precise Balance to each other, then  
both Bodies remain in a State, of Rest;'find evon those Very  
Motions which are most regularly perform’d,nand carried on  
by the strictest and most uniform .Laws of Order., Harmony and  
Proportion, are no more than'the heaiitiful Result, of the vari-  
ous Situations and Combinations of different Bodies"mutually  
acting upon, and resisting each other ; for 'tisffusprirmg whet  
considerable Effects may be produced only by the Situation edf  
Bedies A familiar Illustration. of -this - Point, may -he drawn  
from the Action-'of the Lever';- for no incorporeal-exter.-  
mal Principle; much less a *.Caroressu Wifdom of Nature,'naheati.*thy she is enabled to produce' Motion,, ts requisite Tor. harrying  
on the regular -and -orderly-Motions of Bodies.";- buta certain  
moving Force is originally impress'd upon these-Bod ieachem-  
TelVes, which may be either augmented or diminished accord-  
ing to their Situation and Disposition: Since in Productions’of  
‘human Art, so wonderful and curious Effects- stow only from  
the Action of Bodies upon one another/ this must necessarily  
happen in a greater Degree in the Fabric of the human Body,  
-that incomparable Machine, do.delicately form'd,, and exqui-  
ssitely finish'd, bv the all-powerful Hand of God jIforsthe human  
Body must, in dignity *of Structure; excel* all. Productions of  
human Art; in the same Degree; thajoimaugussaBffvenerable  
Architect surpasses frail and imperfect- Mortals in Grandeur,  
Power and Skill : Since this- Body -is a Machine, .in the  
Formation of which, the-richest Stores of infinite-Art have,  
if I may be allowed the Expression, heen exhausted.4 Since  
Tis a Machine formed by -the incest Art, and. in--which,  
almost all the Laws of Mechanics, Statics, Hydraulics, and  
Optics, take Place, a Vast find amazing Variety of every  
Species of Motion must happen in it. - A Physician must, for  
this Reason, make it his principal Care to understand the Tex-  
lure of this Machine, and to -know the Laws of the-several  
Motions produced in it, whether by the Ain,---Aliments, or  
Medicines. When, a .Physician throughly comprehends these!  
Jhings, he can scarcely be ignorant of the genuine Bent and  
Tendency of Nature, het must- plainly-tee, that sho is-het  
only the bountiful Source of Life find Health, but that she  
likewise governs and directs the:Operation of Medininas, and  
allthe severalMotinns that happen in the Body. When theWord  
*'Nature* is taken in this Acceptation, as indeed it ought to he,  
then Physic is placed upon a true Foundation, and stands secure  
upon a Rock thavcannot be shaken by the vain Efforts of Ima-  
gination and Error. And indeed a Physician who goes thus to  
'work, cannot he ignorant when- Nature is well disposed, and  
when otherwise; but must know in what Life,Tiealth, Diseases,  
and Death Itself consist ; nor can the ReasonS-for a right Me-  
‘shod of Cure, and a proper Choice of Medicines, escape him.

Is on the other- hand. Nature should, aS with some of the  
'Antients,' be styled *Medicatrix Morbortem, GsTheCarcrof  
Diseases,* then nothing more is'means, than the Body, itself,  
adapted with singular Art and Contrivance, for the Production  
of certain Motions ; for by this peculiar Benefit and Assistance  
os the solid and fluid Parts, of which it is composed, ins well as  
by the Qualities os the Elements find Food, it is enabled expe-  
llitioufly to perform certain regular and stated Motions, which  
conduce’ Very much not only m the - Preservation of Life, but  
also the Removal of the Causes of Diseases. For this Reason,  
thet this beautiful and curious Fabric of the Body may he  
throughly known, and its minutest Parts discovered,. Anatomy  
IS to be carefully ffady'd, since it is the only Branch of Learn-  
Sing which can supply us withan accurate Knowledge of its?  
Structure. Besides, the Body can neither subsist-; preserve Life,\*  
nor escape the Fury of Diseases, unless it be guarded and forti-  
fied by external Means, such as Air, Food, and Medicines;-  
and from this Circumstance arises the indispensable Necessity os  
Physic, which is, as it were, an Assistant to *Nature,* - considers  
and governs her several Motions, discovers what occasions a  
good, and what a bad State of Health, and taker care; that.  
things of hurtful Qualities be avoided and removed from the  
Body. And altho' many have heen bless’d with in long and  
’prosperous Life without the Assistance of Physicians, yet they  
'never arrived at that happy State without the Assistance of  
Physic itself, that is, without Remedies, or proper Food; and  
. Regimen. How daring a Piece of Insolence must it then he  
to affirm, that Nature alone is sufficient for the Cure of Diseases,  
'finde in many, both of the acute\* and chronical Kind, she can

do littie or nothing without the Aid of a Physician ? It is not  
therefore sufficiens, that the Physician has the Advantage of  
long Practice, and great Experience; that he knows what things  
are advantageous, and what are prejudicial; thar he knows the  
Symptoms of a beginning Disease, or the precise Form and  
Manner in which it quits the Patient ; hut he must carefully  
weigh Circumstances and Reasons, and from them form his  
Judgment of Diseases, foretel. their Events, -and take rational  
and prudent Steps for their Cure. If any one follows this Me-  
thod, he cannot so far miscarry in the Practice of Physic,  
which is a Work of the highest importance, as to be of no Use  
to the Patient, for 'tis abundantly plain, thet a Reliance upon  
Experience alone has too .often imposed both on the Physi-  
cian, and the Patient; wherefore in so great .a Concurrence of  
Causes, 'th proper to call in Reason and Philosophy to our  
Assistance, that so the true one may be discovered. Hence  
arises the Necessity of rational Medicine, which, being founded  
upon the Principles of Philosophy, must os Consequence be  
preferable to that which is circumscribed within the scanty  
Bounds of Practice and Observation. But such a Physic as is  
supported upon the Principles of Reason and Philosophy, not  
only deduces and solves the Phenomena occurring in Practice,  
Jrom sure and uncontested Principles, but likewise greatly assists  
Practice itself, by suggesting the most salutary Maxims, for  
discovering a safe and easy Method of Cure. It is not indeed  
to be denied, that Physio drew her illustrioiisf Origin from Kx-  
perience; but it must at the same time be downed, that she  
received her most striking Charms, and .all' those Degrees of  
Beauty and Perfection, which at present'Tet her at the Head  
of all her *Sister Arts,* from Reason and Philosophy. But for  
acquiring a Knowledge of this rational Medicine, Anatomy is  
absolutely and indispensably necessary, fince without the latter,  
.the former cannot possibly he obtain’d. - si Yκαὶ  
. It must indeed be confess'd,; that Anatomy does not directly  
and immediately cure the Sink ; bur yet jt has AhappyTeher  
dency to make the Cure proceed more safely and agreeably?  
than it would otherwise do. *Celsius,* in his Preface, very justly  
observes, that *though thcre are.many things which do not belong  
to the Acts themselves, yet these vary things prove useful to them,  
by quickening ana improving the Genius and Taste of she Artisse*Thus, tho’ a Contemplation of the Works of. Nature may nut  
form a Physician, yet it renders him better qualified for the  
Practice of Physic. In liloe manner, tho'Anatomy does **her**Constitute a Physician, yet in proves at once im Ornament and  
an Assistance to him, by supplying him with wholsome and  
salutary Maxims, for the Direction and Regulation *os* his  
Practice; for no Branch of Learning is of greater Use and  
Advantage for discovering Errors in Practice, applying Reme-  
dies, and giving just Prognostics, than Anatomy is, as I shall  
shew more fully in the Course of this Dissertation.

I shall begin with that divine and noble Discovery the Circu-  
lation of the Blood; and'indeed he must he blind, who does  
not perceive the Clouds of Darkness that have been dispell'd,  
and the glorious Light that has been shed nponPhysic, by this  
celestial Discovery; for when, by an accurate Inspection of  
the human Body, we find that the Blood,find other Humours,  
are continually carried through numberless small Meanders, by  
the Vibration and Tone of the solid and muscular Parts; then  
we come to know wherein Life consists. We shall likewise  
he convinced of the Excellency of Anatomy, *if* we allowour-  
selves to consider, how egregioufly the Antients, who neglect-  
ed the Improvement of this useful Art, blundered in defining  
*Life*; for they vainly amused themselveS with idle WhirnS and  
Conceits in this important ’ Affair, asserting the Cause os Lite  
to be *the Action os. the Soul, or Nature, upon the Body a vital  
Spirit', asinall Plame in the Heart; an innate Hoaty the Tem-  
per ament os. the four Humours, and an implanted and influencing.  
Spirit.* These useless and unmeaning Dreams receiv’d a fatal  
Blow, and sell to the Ground at once, upon the Discovery os  
the Circulation of the Blood, which, so long as it washes the  
Body with its perpetual Stream, affords us the Evidence of our  
Senses for the Existence of.Lise; for 'tis the bountiful Office  
of this salutary Motion, to keep the Body safe and free from Cor-  
ruption, to which 'tis otherwise very much subject. Neither  
are we to forget, that the Life of the Body is not, properly and  
strictly speaking, the Duration or Preservation of a compound  
Substance; for if this was the Cose, and is Life was sustained  
in this manner, a Stone, or a Piece of Bread, might he said to  
live, so long as its respective Mixture or Composition remains  
cd. Lise is more properly and accurately defined, a perpetual  
Action and Motion, by which the Body is principally pre-  
served from Filth and Corruption. For as Putrefaction is no  
more than an intestine Motion produced in the Fluids'by some  
external. Cause, and destroying the Moisture of the Parts, so  
'tis plain, that it can only he check'd by their internal, which  
is promoted by their progressive. Motion; and this Motion won-  
dersully resists the circumambient Atmosphere, and its external  
Action upon the State and intimate Mixture os the Blood ,  
sor the Body is immediately exposed to che Injuries of the Air,  
as soon as the fluid Particles of the Blood coure to **be in a**

State of Rest. As Medicine in general, so more especially the  
pathologic and therapeutic Branches of it, have received incre-  
dible Advantages from this Discovery; fince by it wo come to  
know, that nothing can he more fetal to Lise, or more repugn-  
ant to Health, than thofe things which either hinder, or in the  
least disturb the free and salutary. Circulation of the Blood.  
'Tis no hard Task to find the Reason, why Violent Cold is so  
prejudicial to the Body, or why Draughts of cold Liquors,  
drank by Persons over-heated, produce Death. Hence ’tis like-  
wise plain, why polypous Concretions adhering to the Orifices  
of the Vesseis near to the'Heart’and Lungs, produce sudden  
and unexpected Death, by intercepting the Course of the Bloodi  
From the Circulation of the Blood, we are also enabled th  
assign a Reason, why Poisons prove so fatal to the Body ;. for,  
in my Opinion, they can scarce produce their Effects in any  
Other way, than by exciting Violent Spasms in the Vessels,  
contracting them, and so hindering the free Course of the Blood  
through them.*. We* likewise know from this, that all acid and  
Viscid Substances,1 as also too plentiful Feeding, are destructive  
of Health, and hu’rtsol to the Body,\* because, ’either by inspis-  
sating or augmenting the Juices, they hinder their free Circli-  
lation, and produce immediate Loss of Health. As this is the  
Case, we may easily, from the Doctrine of\* the Blond's Cireut.  
lation, deduce the most wholsome'and salutary Rules sor the  
.Preservation os Health and Lise *y* for every one’who is'send of  
'along and happyTife, must by the Benefit os This Discovery  
perceive, that .It', is his chief and principal Interest to preserve  
'the Circulation os his Blood uninterrupted, safe, and entire;  
Hence he must see the Necessity of abstaining both from such  
things aS coagulate his Blood, and from such as, by augment-  
ing its Quantity beyond a proper Degree, render is. less' fit for  
shaking its way through the several Vesseis of his Body. He  
ought, on ’ the other'hand, to use all such things aS have a Ten-  
dency to preserve lais Vital juices in a due State os Fluidity,  
Tuch as Volatile Salts, Aromatics, and warm Infusions of bai-  
sainic Herbs, by means of which, the due Motion of the Blood  
is most effectually preserved. From this Discovery we must  
likewise 'perceive, that in case of too great an Affluence of  
'Blood, its Quantity must be diminished; and that, in such  
'Cafes, Bleeding must not only he proper, but eyen prove the  
sole and only Preservative of Life, .. ....

‘" Besides, Anatomy furnishes 'us'with abundance os Reasons,  
why Death, in Spite of all the Medicines in the World, mini  
prove the Fate of every Individual; for Life, winch' is no  
more than the perpetual Motion of the Fluids, not only de-  
pends upon their due Temperament, but also, and that more  
especially, upon Ἀ certain Motion of the solid Parts. Now  
when old Age begins to approach, the moving Fibres gradually  
become hard, thick, and immoveable, the Pores are shut up,  
sand the Vesseis are too full. Hence the Fibres, not being fussici-  
ently animated by the subtle nervous Fluid, become stiff, inflexi-  
file, and unfit for protruding the Blond thro' the Body. Besides,  
when the cutaneous Pores are obstructed, the several Excretions  
intlst of course he retarded, and recrementitious Filth must he  
accumulated in the Body; the Consequence of which is, first, a  
bad Habit of Body, and, not long aster,’inevitable Death. If  
we reflect with a little Attention upon this Circumstance, **the**most effectual Means of obtaining a long Life Cannot sail to sug-  
**gest** themselves to us, and convince us, that we ought to place  
our principal Care in preserving our several Juices in a due State  
of Fluidity, lest, thro' a Defect in that Point, the Pores should  
be block’d up, and the Fibres become gross' and rigid. For  
preventing this. Motion and Exercise are Very proper, fince  
they are exquisitely calculated for preserving our Fluids in their  
due State. A pure and serene Ain, thin and light Water, good  
small’Wine, Food which contains little of an earthy and com-  
pact'Substance, and which is light, and of easy Digestion, and  
Composure of Mind, contribute also to this End.’ When these  
Things are diligently attended to, and Health regulated by these  
Measures, Life must be preserved the longest that the Condi-  
tion of our Natures will admit of.' Nor is frequent Phlebotomy  
to he neglected, the Usefulness os which, for protracting Lise,  
is sufficiently shewn by the' Discovery of the Blond's Circu-  
lation ; for 'tin plain, that by this means Bleed, \* which by  
reason of its Abundance, is become think and stow in in Mo-  
tion, must he restored to its due and regular Course thro' **the**Body ': Neither have we any Reason to be afraid of exhausting

. this rich Fountain of. Life, since, as *Galen* has observed, the  
AntichtS took whole Pounds', instead of Ounces, aS the Mo-  
derns doi .'

Py the Help of Anatomy we likewise become acquainted with  
the formal Cause of Death, which, in whatever Shape it de-  
prives a Man of Lise, inay he distributed mm four Clastes . for  
there must be either an Inflammation of the more noble Parts,  
such as the Meninges, Lungs, Stomach, and Intestines; or extra-  
Vasated Blood or Serum, as usually happens in the Brain, Thorax,  
and Abdomen ; or some os the Viscera must he corruptedor a  
Polypus must be shrined among the Vessels *of* the Heart or Lungs,  
obstructing the free Circulation of the Blood. I fay, where-ever  
Death happens, It must be owing to one or other of these

Causes, as is plain from all Dissections. ' And, indeed, an In-  
flammation is the Cause of Death in acute Disorders; and a  
Corruption, of the Viscera, or an Extravasation os Blond or  
Serum, produces the same Effect in chronical Cases.. But a Poly-  
pus is generally sound to he, of all others, the most speedy Cause  
of Death. These several Causes os Death plainly shew, that it  
is nothing more then a Destruction of the Circulation os tho  
Blood. From the joint Consideration os these Circumstances, it  
follows, that he who intends to ward off Death, must be at dule  
Tains to prevent Inflammations of the.internal Parts of his  
Body, Weaknesses or Obstructions of his Viscera, and Extra-  
vasations of his Blood and other Juices. ' . .

This same Discovery, I mean thet of the Circulation of the  
Blood,which isxwithout Doubt, the surest Prop, and the noblest  
Ground-work os all Medicine, clearly accounts for the Causes  
of Health, and sufficiently shews, tharit can only he expected  
from a free and due Circulation os the Blood and Humours, and  
'the several Excretions being carried on with Regularity.. For  
when the Blood is carried thro’ the Body in a calm, regular,  
and imisorrn: Manner, then tho several Elements of which it  
consists,, are not only duly mixed with each other, but every  
thing shafts’ of a recrementi tious Nature, every thing that of-  
fends either in Quantity or 'Quality, is by that means eva-  
cuated, and drawn out *of* the Body. ' Thus all the animal  
Functions are performed, according to the Order and stated  
Laws os Nature; thus Health, and thus the Vigour of Health,  
are preserved^ Those must therefore err, who maintain, that  
Life consists in the Excretions being duly ’made 7 because Life,  
eVen when the Excretions are.entirely out os the Account, .may  
cease; and Experience proves, that many die ar the Very time  
their Excretions are performed. r We therefore, with better  
Reason, affirm that Health depends upon the Circulation os the  
Blood, which, when duly carried thro’ the Body, renders the  
several Excretions regular and natural; whereas, when its  
Motion is Too languid, or impair’d by any Disease, the Excre-  
'tions are interrupted ; nor, indeed, can there be any Disease th  
-which the Excretions do not suffer. We even often see Patience  
'the, rather'from the Excretions being too copious, .than srorn  
their being deficient; aS may be observed in acute Disorders,  
hectic Cases, Dysenteries, and other Diseases os a like Nature.  
That Physicinn, therefore, acts a Part entirely consistant with  
.the Dignity of his Character, who, in the.Cure of Distempers,  
’has a Regard not only to the Circulation of thoBlood, but also  
To the several Excretions, especially thatsos Transpiration, st.

Since our Fluids pass thro' the Body very often every Day,  
and since indulgent Nature has every-where bountifully pro-  
.vided proper Emunctories for the Excretion os the recrementi-  
tious Matter, we must take care, that these Emunctories be  
always kept open ; for by this means the Blood is rendered lim-  
pid, pure, and balsamic ;and all such things‘aS'are capable this  
laying a Foundation for Diseases, are eliminated out of the  
Body. Among the several Emunctories, which are evidentiy to  
be sound in the Body, those of the Skin, by which, as *Celsius*says. Transpiration is carried on, as it were, thro' so many imp.  
. sible little Holes, are the most considerable; for whet friendly  
Offices Transpiration performs to the Body, and how much it  
contributes to the Preservation of Health, may be conceived  
from this Circumstance ; that more recrementitious Matter,  
and that too of a more Virulent Quality, is discharged from the  
Body in this way, than by all the other Excretions together.  
Hence 'tis plain, that nothing can heve a more direct and rml  
mediate Tendency , to bring on Diseases, than a Suppression of  
.the several Excretions, especially that hy which the Filth and  
Sordes of the Body are carried off by Transpiration. As this  
is the Case, the Practice of that Physician must be rational,  
who, when he is perfectly acquainted with the Origin of the  
Disorder, restores the usual Excretions, opens the obstructed  
Emunctories, and disposes them to afford a free and easy Pas-  
sage to the malignant and Virulent Sordes: But this is most  
effectually brought about by means os a pretty quick and acce-  
lerated Motion in the Fluids; which, when it happens in acute  
Disorders, and especially in Fevers, sufficiently accounts for the  
Patientis recovering Health only by the Benefit of Nature,  
without any great Trouble to the Physician: For this intense  
Motion expels the Cause of the Disease, opens the Emunctories,  
attenuates the Humours, and soon restores perfect Health. The  
Reverse os this happens in Diseases os the chronical Kind, and  
of long Continuance, where the Motions, being fluggishly car-  
ried on,. are to he accelerated by Art, and the Weakness os  
Nature is by that means to be assisted. In Disorders therefore  
*of* this Kind, Sudorincs, Chalybeats, Bitters, Salts, Purgatives,  
warm Baths, and mineral Waters, aro of singular Advantage;  
and the Virtues of these Remedies, in Cafes of this Nature, are  
to be accounted for only from this. That by their quick and  
accelerated Motion they remove the Obstructions of the Body,  
and, by restoring the several Excretions, reduce the Fluids to a  
natural and orderly State. The same Reason may be assigned,  
why Motion and Exercise, rite Drinking os wholsome mineral  
Waters, and the Clemency of the Air and Climate, have so

happy ah Influence upon chronical Disorders, and prove so effed-.  
tual in carrying them off. T ........ .

But fince the Antients were ignorant of the Blood's Circula-  
tion, we need not he much surprised, that'they fell into various  
Errors in Practice; but, to pass over others of their Blunders,  
ctis well known how careful, or, to speak more properly, how  
whimsical and superstitious they were in opening certain Veins,  
being groundlessly persuaded, that this or that particular Vein  
was appropriated or consecrated to' this or that particular Part ;  
the Head, for Instance, the Heart, or the Liver; and tliat, in  
the Diseases of those Parts, it was necessary to open them respe-  
ctive Veins. In Process of Time, when Anatomy began to be  
.improved, these wild Chimeras were, entirely banished ; for we  
have learned, that there are two Uses in Bleeding, that is. Eva-  
cuation and Derivation , the former of which is serviceable in  
case of too great ^'Quantity of Blood, and 'tis no great Mar-  
ter which V ein be opened : But, ih order to make’a Deriva-  
tion, we are taught to open a Vein in the upper or lower Parts  
of the Body, as the Nature and Circumstances Of the Disorder  
shall require. . ’ T " \* /  
' From Anatomy 'tis also plain, that the four Humours, and  
their Intemperies, were, by the Antients, salfl/proposed as the  
Causes of Diseases;'for these VersiHUmonrs appear.im-where  
in the Body, so that their Theory must, os course,''salito tho  
Ground, fince It was built upon a Foundation To-precarious  
and uncertain : -Hence it happened, that the principal Part of  
.their Medicines consisted generally ds strong Purges, whilst they  
supposed, that. Purgatives had *s elective squality,* and idly ima-  
gined, that one was proper *for* Surging Bile, another Melan-  
choly, and another Phlegm. And although I willingly allow,  
that one of thefe Medicines may. he preferable to another, and  
better calculated for breaking the Force, and removing the  
Cause, of certain Distempers, yet. I cannot approve of their  
Opinion, since it .is entirely'inconsistent with the Circula-  
tion of the Blood,‘from which alone the Causes both of Lise  
herd Diseases are derived: For; whatever Purges act strongly  
and violently, must throw out' whatever kinds of Humours  
are lodged in the Body, whether they be Viscid or bilious;  
and, for this Very Reason, the Antients were faulty , in their  
Practice, fince they made so frequent Use of the strongest  
Purgatives.:.. For in the Days of *Galen,* and more. especially:  
in those os *Hippocrates,* the more - gentie Laxatives\* had no  
Place in Practice, but the Patients were racked with Hellebore,.  
Colocynth, Scammony, Elaterium, - and other Purgatives of a .  
like Stamp. Yet Experience has taught us, that these Medicines  
are so far froth being beneficial, that they are Very noxious and  
.hurtful to our- Constitutions; for they destroy file Tone, and  
impair the Strength of the Intestines, which are so necessary for  
the Preservation of Life; they diminish the Force and Strength  
of the Membranes by spasmodic Constrictions, exhaust and car-  
ry off the balsamic Bile, and disturb the salutary Excretions, by  
drawing that Humour which should be discharged through the  
Skin, from the Circumference to the Centre of the Body. Nor  
can any other Cause be assigned for this Error in Practice, than  
then ignorance of Anatomy, which, aS soon aS she rear'd her  
Head above those Clouds of Darkness, with which she had, till  
then, been incircled, detected these errors, and instructed us  
to beware of them for the future.‘

Besides, their immense Number of Medicines sufficiently  
proves, that their Practice was confused, and their Industry, in  
some Degree, superfluous ; for what is the Design of so- many  
Cordials,’ Hepatics, Splenetics, Uterines, Antiepileptics, An-  
thelminthios, 'and Remedies appropriated. to each Part os **the**Body ? Whet can be the End os such a Multitude osRemedies,  
but to convince us, that the Physician, amidst such a Store *of*various Medicines, knew only the Virtues and Qualities of **a**Tew ? For Diseases are cured within few, but well-chose Medi.-.  
cines, which the Antients being ignorant of, contrived such 2  
cumbersome *Materia Medica,* under so many trifling and incon-  
sistent Forms. It was likewise their Misfortune, that the richer  
and more noble Medicines were not known in their Days, such  
as Volatile Salts, neutral Salts, the right Use of Anodynes ; as  
also the several Preparations of Steel, Antimony, and Mercury.  
AS it was their Misfortune to be ignorant of these Things, they  
must of consequence be very ill qualified for tile Cure of chro-  
nical Disorders ; or if they attempted a Cure in Cases of this  
Nature, it was dono by Regimen, Abstinence, Phlebotomy,  
Frictions, Baths, Exercise, Change of Air, and then last Re-  
source was the Knife, and Fire. The very Nature of the Cli-  
mate, in which some of the antient Physicians lived, was also a  
Circumstance which very much contributed to the Cure of some  
Diseases ; for in those warm Countries, such *zsGreece* and *Italy,*Diseases are not very deeply rooted, .and are therefore cured with  
little Pains and Trouble : But in acute Disorders, aS Nature  
always challenges a greater Share of the Cure than Art, so 'tis  
not to be doubted but, among the Antients, these short-lived  
Disorders have heen removed by the Force of Nature, aided by  
the Temperature of the Climate, and the Clemency of the Air.  
Now that we stand in need of fewer Medicines, and are Masters

of a Method of Cure which is safe, easy, and simple in Compa-  
rison of theirs, is, in my Opinion, owing to our Knowledge of  
Anatomy ; for since 'tis the principal Bufiness *of every* Physi-  
cian to take care, that the Quantity, Temperament, and Mix-  
ture of the several Humours, be duly proportioned to the Veil  
seis and Strength of the Patient; and that .these Humours be  
kept continually circulating, whilst, at the same time, the Ex-  
cretions are regularly made ; since this is the whole Business of  
a Physician, every one must see, how sew Medicines are requi-  
site to answer these several Ends.

. Having thus considered, how useful a Knowledge of the  
Blood’s Circulation is in Practice, I now come to take a View  
of the Advantages accruing to it, from Our Acquaintance with  
the Structure os some other Parts. The first I shall mention, is  
that common Covering of the Body, the Skin, the Texture of  
which if we understand, by means of Anatomy, we shall not  
only shun the Errors commonly received with regard to it, but  
likewise be greatly assisted in the Cure of Diseases : In the Skin  
various Vessels, Tendons, and Nerves terminate, with which  
some small Glands, or small Villose Bedies, are interwove, that  
the thickSerum, and the salt, agile, and aerial Principle, may he  
the more commodioufly secreted. If a practical Physician right-  
ly understands this Structure of the Skin, which is only: sit for  
the Excretion of Very small Particles, he must be convinced,  
that the Pores of the .Skin, destined for a Discharge of the finest  
Particles, must be very ill-adapted to carry off the Viscid and  
bilious Sordes collected in the *Prima Via.* . Whenever, there-  
fore; the Stomach and Intestines are become turgid with Hu-  
rnours of this Kind, as it usually happens in intermittent Fevers,  
Quartans, hysteric and hypochondriac Disorders, the Physician  
is carefully to. avoid prescribing all hot Medicines, and the  
stronger Sudorifics; for these, instead *of* procuring Stools, which in-  
.deed ought to be done, rather make the Patient costive, by driving  
the Load of recrementitious Matter from the Centre to the Cir-  
cumference os . the Body, and mixing it with the Mass of Blood.  
This Practice is likewise to be shurm'cl; when the Bile, in confe-  
quence of a sudden Sally of Passion, has quitted its proper Cha-  
nels, and lodged itself in the Stomach and intestines; for is,  
heing put into a Commotion by warm Medicines, it should pass  
into the Bleed., it resembles the Nature of Poison, produces the  
same deleterious .Effects, and threatens the Patient with immi-.  
hent Danger si In such a Case; therefore, the Physician must, if  
he pretends to act up to the Principles of his Art, take care to

. evacuate that Load of Humours lodged in the Stomach and In-  
testines, by the proper Emunctories, and with the Assistance of  
gentle Laxatives. .

By this same Anatomical Observation we are taught, that this  
Method of Evacuation is less proper when saline, caustic, and  
subtile Sordes are mixed with the Blood; for these should have  
a way made for them thro' the Skin ; the Pores are therefore,  
in such a Case, to he kept open by a due Degree of Heat, and  
proper Medicines: And this is to he carefully attended to, in all  
Diseases where Sordes of this Kinds are offensive, as Erysipelas,  
Itch, Purple Fever,. Petechical FeVer, Small-pox, Meafles,  
and Gout, especially if the Pustules are struck back into the  
Body. All these Things plainly shew a Physician, who ought  
to be the Assistant of Nature, that nothing can better qualify  
him for being so, than a Knowledge of Anatomy ; but because  
the Skin is, upon account of the Nerves, and Tendons which  
terminate in it, of a very quick and exquisite Sensation, and  
consequently Very easily constricted, a Physician ought to guard  
against ail those things which contract the Pores, and prevent a  
free and wholsome Transpiration. This is principally to he  
regarded in Diseases where the Blond abounds with impure  
and saltish Recrements; and all possible Care is m he taken,  
That the sharp and noxious Matter, which should he discharged  
thro' the Skin, be not imprudentiy struck back into the Body,  
and Mass os Bleed: For this Reason we are to avoid cold and  
moist Applications, Ointments, PlaisterS, and whatever may  
contract the Skin; but this Caution is particularly necessary in  
pustular Disorders, such as Itches, Gout, scald Heads, Lepro-  
sies, Erysipelas; and also in critical Sweats, lost by the rash  
Use css these things we precipitate the Fate of the Patient.

Next to the Skin the Fat presents itself, from an accurate  
Contemplation of which, the practical Physician must likewise  
receive Advantages, that will more than counterbalance his  
Toil in the Research ; for as this Substance is laid thicker upon  
some Parts of the Body than others, so, by this very Circum-  
stance, it points out to us the true Method of applying external  
Remedies, or, as we commonly call them. Topics. Thus, for  
Instance, the Person who applies external Medicines to his Hip  
or Thigh, in order to remove the Agonies of Sciatic Pains, will  
find his expedient attended with Very little Success ; because the  
Abundance of the Fat, and the Thickness of the Muscles, pre-  
vent, in a great measure, fire Medicines from reaching the Part  
affected. Nor will he act more rationally, who, in order to  
cure the Disorders of his Stomach, applies PlaisterS to his Ster-  
num or Abdomen ; because, in these Parts, such Remedies, pro-  
duce Very little Effect on account of the Fat, with which the  
Abdomen is covered. *(It is necejsiary to remark here, that thd\**

Hoffman *may be right in the general upon this Subject, yet, foeitdj  
respect to Applications to the Hips, Abdomen and Stomach, Expe-  
rience manifestly contradicts him, since there are Topics-uhich  
exert considerable Effect sleuth on applied te these Parts. Our Au-  
thor here, in defending Theory, 'which may be rendered eatiremely  
useful, has given us an Instance of its Misapplication, thrgr the  
Rajhnese and Sels.—s.ufficiency of human Wisuom. In Philosophy,  
as well as Divinity, we are subject to arrogate to ourselves supreme  
Knowledge, and, in consequence of that, rasuly to deny the Exist-  
ence of Things and Effects, unlese we can comprehend them, and  
conceive in vjhat manner they are brought about ; vvhcreas Nature,  
or its alsupowerful Author, has ways of Acting to which we are,  
at present, Strangcrs, and Resources with which idee arc utterly  
unacquainted.)* We therefore learn from the Principles *os Ana-*tomy, that ln applying Topics, such Parts of the Body must be  
chosen aS are covered with the slenderest Muscles, and the small-  
est Quantity of Fat; For this Reason, the nervous and tendi-  
nous Parts are, of all others, the most proper; such as the Soles  
Of the Feet, the Palms and Wrists of the Hands, the Temples,  
and the Nape of the Necki Medicines of this Kind may be  
also applied, with Advantage, under the Arm-pits, and to tho  
Hollows of the Hams; from which Parts their Virtues are sen-  
sibly diffused thro' all the Body. When therefore, in case of  
too great a Heat and Fervor, the Body is to he cooled, it is pro-  
per to apply, to the above-mentioned Parts, Liquors that are  
somewhat acid, and gently repressing ; for; by the Use of these,  
the Body is surprifingly refreshed. The same Practide is to be  
followed in allaying Spasms in Fevers, in which Case also cor-  
roboratiVe and subastringent PlaisterS may, with Success, be  
applied to the Nape of the Neck; theTemples, and the Wrists:  
But when the nervous System is to be strengthened, 'tis proper,  
now-and-then, towarm and cherish the Nape os the Neck,  
and the Sutures of the Head, with mild and balsamic Corrobo-  
ratives. When the Force os the languid and unactive Nerves  
is to he excited, or a Viscid Humour to be diflodged from some  
particular Part, the Intention is best answered by Vesicatories,  
applied to the Nape of the Neck. Lastly, in a *Lues Vinerea,* or  
an Itch, which Disorders are often happily carried off by a sea-  
sonable Salivation, it is most safely raised by applying mercurial  
Ointments to the Arm-pits.

An accurate Knowledge of the Structure of the Navel will  
also qualify a Physician for the Application of Topics, with equal  
Prudence and Success ; for 'tis known, that the *Linea Alba is*contiguous to the Navel, which; of itself, is a Part most  
sensible of Impressions : In this *Linea Alba* many considerable  
Tendons centre; so that 'tis plain, that Part must be endowed  
with a Very quick and exquisite Sense, and therefore heve a  
Consent with the whole Body; for 'tis Very remarkable, that  
all the nervous Parts of the Body, if strongly irritated, or other-  
wise affected, do at the same time put the whole Body into a  
Commotion, by reason of the mutual and uninterrupted Con-  
nection of the Nerves dispersed up and down it: For this Rea-  
son we are not to wonder, if Medicines applied to the Navel  
do not confine their Efficacy to that particular Part, but convey  
it to the most distant and remote Quarters of the Bedy, by means  
of the many considerable Nerves which run thro' the NaVeL  
Thus 'tis known, from a celebrated Family Experiment, that  
the Quantity of a Nut, of fresh Butter, applied to the NaVeis  
of Children, procures them Stools : And is Worms are lodged  
in the intestines, if the Navel is anointed with Bull's-gall inspis-  
sated with the Ointment of Sow-bread, and mixed with Oil  
of Colocynth, it stimulates the Intestines to expel the Worms;  
In the convulsive Colic, which is indeed a Very terrible Disor-  
der, the Agonies of Pain are surprisingly allay'd by anointing  
the Navel with a few Grains of Civet. Nor is less Relies to be  
expected in a Suppression os Urine, from carefully anointing the  
Navel with Oil of Turpentine ; for the Discharge of the Urine  
will be wonderfully promoted by that means, since the Umbili-  
cal Arteries adhere to the Sides of the Bladder.

The Diseases of the internal Parts, and the most proper Me-  
thods of curing them, must be made known to us by consider-  
ing their Situations, and the several Parts where they are placed:  
Thus we know, that the Stomach is inclined to the Left Side;  
and that its upper Orifice adheres to the *Spina Dorsi,* whereas its  
inferior Orifice is covered with the *Scrobiculum Cordis.* From  
this Circumstance it is Very plain, that the most intense Pain,  
which has erroneoufly got its Denomination from the Heart,  
proceeds entirely from the Stomach ; and thet the Seat of a *Card  
dialgia,* as is groundlessly thought, is not in the Left, but rather  
in the Right Side of the Stomach : For leaving the Seat of the  
Pain, which is under the *Scrobiculum Cordis,* entirely out of the  
Question, this appears plainly from this Circumstance, that the  
Bile, which frequentiy excites the Pain, lies nearer to the Right  
than to the Left Orifice : Hence those, who labour under Ob-  
structions of the Liver, are most frequently troubled with this  
Disorder. Now when the Pain Itself has reached the Very  
Baek; the Left Mouth or Orifice must also inevitably suffer:  
Anatomy therefore teaches us, that; in this Case, PlaisterS, spi-  
rituous Substances, Balsamics, and fuch things as are calculated  
for strengthening the Stomach, and allaying Pain, are to he

externally applied to the *Scrobiculum Cordis,* and the Left Side  
under the false Ribs. From Anatomy we also learn, that this  
Disorder is most effectually relieved thy such Medicines as cor-  
rect the Acrimony os the Humours, and discuss Flatulencies.  
Besides, because the Stomach, as Anatomy teaches us, lies under  
the Diaphragm, it often happens, that its being inflated produces  
the greatest Uneasiness, and Difficulty Os breathing; in which  
Case, the Physician, who is ignorant os Anatomy, would com-:  
Init an egregious Blunder, is he prescribed sweet and emollient  
Pectorals, imagining the Couse os the Disorder to reside in the;  
Lungs ; whereas the Cause itfels, which is a thick Phlegm, and.  
an Inflation, ought rather to be taken away, and the Spasms os  
the Stomach should be removed; both which are often happily,  
effected by gentie Emetics and Laxatives. ..

. The Situation os the Colon, and its sinuous Structure, os  
which the Antients were ignorant, by reason os their Neglect.  
Os Anatomy, has fo deceived them, and even some of the Mo.,  
dems, that they ascribed to a Fault os the Spleen, those Tu-  
mours, especially os the Lest Side, which, in Hypochondriacal  
Cases, proceed from a Flatus, and Ordure pent np in the Fold-;  
ings os the Colon. Is these Men had learn’d, that, the Spleen  
lay under the Diaphragm, and that it was nearer to the Spine,  
they might have easily shunn'd so palpable an Error. For ’tis  
well known, that the Pains, the parching .Heats, and the Tu-.  
monrs, under the salse Ribs os Hypochondriac Persons, appear  
principally in the Lest Side. Add to this, that the Spleen has a.

.. less exquisite Sensation; and by reason os its Bulk, the Circum-  
stance winch generally renders it. troublesome; excites a Very  
heavy and fixed Pain, whereas in Hypochondriac Disorders we  
observe; that the Pain is intense, but soon goes off. . As this is:  
the Case, ’tis plain, that in the Cure os that Disease, carmina-.,  
five Clysters, which dilute the Acrimony os the Humours, and  
defend the nervous Membranes os the Colon, are deservedly  
' preferable to all others. In this Case Carminative Plaisters are  
not to be neglected, winch, when apply’d to the Lest Side,  
strengthen the Tone os the Colon, and afford surprising Relies.

. Another Disorder, which draws its Origin also from the. Co-  
lon, sometimes perplexes the Physician who is ignorant of Ana-  
tomy ; for it sometimes happens, that a Violent Pain suddenly  
arises near the Costa of the Right Ilium, accompanied with an  
obstinate ConstipationOf the Belly; The Cause of. this Disorder  
is this: The Beginning of the Codon is situated there, and con-,  
sista of very strong Ligaments and Membranes, that so it may the.  
more speedily, protrude the Foeces upwards. But when, in Per-,  
fops that are reduc'd by the Violence of some Disease, the Tone  
and Strength of this Intestine are impair'd, Flatuosities .anti  
Faces retain'd in it distend it, resemble a Tumour, and subject  
ine Patient to the most excruciating Agonies. The Cause then  
of this Disorder plainly demonstrates, that in this Cose the only;  
things which can afford Relief are Cataplasms of Carminative  
Seeds and Herbs ; and that 'tis likewise Very proper to wash the  
Intestines with oily Clysters ; for when these arrive at .the Be-  
ginning of the Colon, they powerfully soften the indurated  
Forces, and by that means forward their Expulsion. .

. Violent Pains often arise about the Navel, which, being  
really in the Ilium, are, by .some Physicians, who are ignorant.

' of Anatomy, erroneoufly taken for Colics. Thss Disorder is  
certainly Very frequent, but it was still more so in the Days of ’  
*Hippocrates,* who often makes mention of it, but never of a  
Colin; which seems to he owing to sms, that on account of.  
the Salubrity *of the Grecian* Climate, Colics, as well as Hypo-  
chondriac Disorders, were not frequent. 'Tis therefore highly  
proper, that in the Cure of this Disease we should know the  
Situation of the Intestines, lest we should otherwise apply Me-  
dicines to no Purpose. For tho' in Colics Clysters are Very.'  
proper, yet 'tis Very plain they do little Service in the Iliac-  
Passion, fince they never reach beyond the Valve of the Colon..  
’Tis therefore in vain to have recourse to Clysters for the Cute  
of this Disease ; we are rather to use Plaisters and Ointments  
externally, and internally Oil of sweet Almonds, mint with  
Oil of Anise.

- In this Case also nervous Medicines, and Preparations of  
Castor, are very properly used, hecause they wonderfully miti-  
gate the Violence of theSpafms. *(See* ILIACA PASSIO, *where  
the Reasons vaill be given why emollient Clysters are useful in this  
Case, the? they should not past the Falve of the Colon).*

He who is acquainted with the Situation of the Intestinum  
Rectum, and he close Connection with the Bladder, must per-  
ceive the Reason why a Difficulty in making Water, especially  
if it proceeds from a Wound, or the Stone, is always accompa-  
nied with a Tenesmus, and very often with a Prolapsus Ani.  
The Physician who knows the Situation of this intestine, will  
also he able to assign a Reason, why, in a Tenesmus, the Bladder,  
.is reciprocally stimulated to discharge its Contents. In such a  
Case therefore 'tis carefully to he inquir'd into, whether the  
Fault lies in the Bladder, or in the Intestinum Rectum, lest  
whilst the Cause is unknown, .the Cure should miscarry ; for  
Remedies would be very improperly apply'd to the Bladder, if  
the Intestinum Rectum should happen to be the Seat of the .Dis-  
.order.' - . : . .

It is equally necessary to consider the Situation of the Bladder,  
which is placed in the Very Bosom or upper Part of the Pelvis,:  
and is join'd to the *Os Pubis.* A- numerous and manifest Series,  
of fleshy Fibres run along it, by the Contractinn of which the  
Urine, is discharg'd, and which being again distended by too:  
great a Quantity os Liquor in: the Bladder, their Elasticity is  
proportionably destroy'd, and the Urine suppressed. Hence we  
learn, that for relieving this Disorder, we must apply to the  
Region of the. Pubis such .Medicines aS stimulate the Fibres to a  
Contraction, that so the Efflux of the .Urine may he: restored..  
For answering this Intention, some Oiis are very proper, such  
as Oil of Scorpions, and Juniper, Garlick also, roasted Onions,  
and other Medicines, which have a Tendency to raise and'  
shengthen the weakened Tone Os the Bladder. ' :  
: The Course os the Ureters is towards the Bladder, and pasi- -  
sing in an oblique Direction over the Psoas Muscles, are inserted'  
into its posterior Part. These, I mean the Ureters, consisting-  
of muscular and tendinous Fibres, must necessarily be violently  
irritated by Stones sailing down into them, and remaining there.  
That the Physician may also receive Advantage from thisAnato-.  
mical Observation, it will not be amiss to inform him, that ini  
this Case he is carefully to avoid prescribing Oils of Juniper and;  
Turpentine, Balsam os Sulphur, and all Medicines that are of a.  
sorcing Nature, thecause in this Disorder 'tis his Bufiness to:  
relax the Parts contracted by the Violence of the Spasms ; for\*  
which Reason he will, with more Advantage, have recourse To  
the express'd Oiis, such as OilOf sweet Almonds, Nutmegs ;  
Oil of white Lillies, Scorpions,: Poppy-seeds, Caraway, and'  
others ;- for these, when apply'd to the Region ofthe Loins and.  
Ureters, furprifingly affwage the Pains produced by this Cause. -  
- The like Advantages in curing Diseases stow from consider-.:  
ing that exquisite Congeries Of Nerves,, that Variety of Arte-.  
ries. Veins and Tendons, winch are; interwove with the Me-  
sentery about the last Vertebra of the Back, and first of the'  
Loins; for hence we may reasonably conjecture, that the in-  
tense-Pain which seizes People -in the Beginning of. Intermit-  
ting Fevers, in the Small-Pox, in the Measles, in the Hysteric-  
Passion also, and other acute Disorders, does not arise from a-  
Stoher in the Kidneys, as is generally thought, but from the  
Congeries of Nerves in the Mesentery : For if these he dis-  
tended or Vellicated by Flatulencies, or Blood stagnating in the:  
Intestines, there immediately arises a Pain in *tiaei Spina Dorsi.*I once knew a Physician Very successful in curing this Disease,,  
whoseor that Purpose .Very often used Plainer of Frog’S-Ipawn,'  
with Oil of Henbane and Camphire. On the other hand, nar- ’  
cotic astringent Remedies, and Lead-plaisters, instead of afford-  
ing Relief, rather hasten the Destruction of the Patient. I have  
also often observed, that such Applications, when used with \*  
View to check the menstrual Discharge, not only restrain'd,-  
hut entirely stopp’d it, to the. great Prejudice of the Patient,:  
the Blood being by these Means forc'd upon other Parts.

. I now come to take a Survey of the genuine Structure -of tho  
Viscera, that we may thence see hew useful the Knowledge of-  
Anatomy is in the Practice of Physic. To begin therefore with  
the Lungs, 'tis sufficiently evidens, that since they are com-  
posed of mere Vessels, they must abound with Blood ; sorinnu-  
merable Branches of Vessels, winding in a great many Various-  
Directions, pass thro' them, and thro' the Whole of them Course  
embrace the *Bronchia.* The Pulmonary Artery also, by winch  
the Blood is convey'd from the-Right Ventricle of the Heart into  
the Lungs, appears to he larger than the Aorta itself. Besides,  
the Pulmonary Vein fends so many wonderful and curious  
Branches thro' them, that if melted Wax is injected into these  
Branches, a very considerable Numher of them may be *seen.*This may furnish us with an Argument, that the Diseases off  
the Lungs proceed principally from a Stagnation of the Blood,,  
and a Prevention of its free Circulation thro' them. ’ This is-  
confirmed by a Spiting of Blood, a Peripneumony, a Pleurisy,  
a Phthisis, and all the fatal Train of Diseases which prey up-  
on the Lungs.

. Is we allow these Considerations their due Weight, we must  
evidentiy see, that in Disorders os the Lungs Phlebotomy not  
only affords Relief, but is absolutely necessary, both for the  
Cure .and Preservation of the Patient. . Hence we see with how-  
great Propriety all those Medicines are prescribed in Diseases Os  
the Lungs, which dissolve and attenuate the Blood lodg'd in  
them. The heft and most effectual Remedies of this Class are  
warm Infusions os Herbs that are balsamic, and contain a sub-  
tile nitrous Salt. 'Tis hence also plain to a Demonstration,  
that:in Disorders os the Lungs nothing can be more hurtful  
and pernicious, than astringent Acids, Styptics, viscid Sub-  
stances, and all such Medicines as retard the free Course and  
Circulation of the Blood ; and because the Aspera Arteria enters  
the Lungs, and is itself lin'd with a nervous Membrane, all  
acid and sharp Substances are therefore to be avoided, as hurt-  
ful in Disorders ofthe Breast ; for these not only draw too  
great a Quantity os Bleed to the Part affected, which is already -  
too full, but, which is still worse, stop the Motion and-Cir-  
culation of the Blood. . . .

It now remains, that we take a View of the Structure of the  
Diver, which, of all the Viscera, abounds most with Blood,  
and presents us with Various Vesseis, the precise Numher of  
which 'tis no easy Talk to detennine: EVen the Very Glands  
which are found in the Liver, are no more than the numherless  
Branches of Vesseis; winch, arising from the *Varta Porta* and  
*Pena Cava,* form themselves into membranous Celis of an oval  
Figure, as has been ingeniously observ'd thy *Vieussens,* in his  
Treatise *De novo Fasorum Systentatey* for the Glands of the Li-  
ver secrete the Bile, winch incollected together from various lit-  
tle Vessels interwoven with, -and adhering to one another. :

Now if we consider,, that the Liver is furnish’d with the  
greatest Part of its Blood from the Spleen, .the Omentum, the  
Stomach, the Intestines,: and other Contents Of the Ahdomen,-  
hy means of the *Vena Porta,* and that this. Vein is destitute'of  
a Pulse to propel its .Contents forwards, .we shall he at no Loss  
to conceive whyche Liver should be Very obnoxious to Stagna-,  
tions ofthe Blood, and all the. disinal Train *of* Consequences  
. that follow it;\_ for Obstructions ofthe Vesseis;- Infarctions, 'In-  
durations, and most chronical Disorders, are! the Results of in  
weak. and. languid Circulation, of the Blood thro' the Liver;  
for if a Passage is deny'd. the Blood ithro'. the μεμα *Portae,* and  
the *Pena Caua,* if returnsto the Viscera whence it came, and  
Is deriv'd to she Spleen, the Pancreas, the: Mesentery,, and  
Other Parts. By this, means jr happens, that, so . long as it  
ledges there, it distends .the ^Vessels, and thy .stimulating the  
nervous Membranes occasions Various Spasmodic Disorders, and  
Obstructions...Upon this;Occasion theDymph is extravasated,  
and .hence arise Tumours, .Piles,..Vomitings of: Blood, iiho  
*Morbus. Niger* mentioned *Hippocrates,-* and a numerous  
Train of fuch-like. Disorders : . That ..these may he-exit  
poll'd from the Body,' the prudent .Physician: informs himself  
from Anatomy; that thexhief Intention Of Cure consista m ren--  
dering the.Motion of the Blood theo’ .the rLiVer free and easy.:  
In - Cases of. this Nature.. therefore. Mineral. Waters, -, warm  
Bathe, ’.wholsome Waters 'liberally drank, .all Bitters likewise,,  
saline Substances, fix’d neutral Salts, and in a-Word -all such.  
things aS attenuate the Blood, strengthen the Solids, and restore  
the. Blood, Io its usual Circulation, are of. Service; And when  
the Bleed accumulated in too great Abundance, which is often  
the Case, proves hurtful,, we rnay. easily imagine, that Phlev  
hotomy mint he proper, and:beneficial, because by means of it  
the too great Quantity .of. Blood which distress'd the Patient,  
by distending his Vessels, and breeding Obstructions, is happily  
diminished. et.:i .: . sun. Ἀπὸ. - - . S

Besides, by Anatomy we discover; that the LiVer adheres  
to the Diaphragm, which particular Structure, like all the other  
Works os the supreme Creator, was design'd to answer, a  
noble and important End,, which is, that by the frequent  
Motion of the Diaphragm in Respiration, the Liver, which  
adheres to it, might he agitated and put into Motion ; and by  
that means the: languid 'Motion of the Blood- quickened and  
accelerated; . which is a sure Proof, that in. Diseases of this  
Kind, Motionis a proper Remedy, and that for this Reason,  
Exercise,' Walking, Riding, and other Species of Motion, are  
deservedly prescribed. If we farther .consider,, that the Haemor-  
rhoidal Vessels, which are extended longitndinally upon: the  
‘ Colon and Intestinum Rectum, are at a. vast Distance from the

Trunk of *rfoeVena Porta,* and that "all perpendicular Ascents,  
as they are’called, are performed with Difficulty, we must  
easily perceive, that fince the Blood pastes with Difficulty thro’  
the Vena Portae, and the Viscera of the Abdomen, it must  
. readily stagnate, and, having burst the Vesseis, .especially if the

Patient is seiz'd with Spasms, flow from the-Mouths of the  
Veins. Hence it must he proper in Disorders of this Kind to  
corroborate the solid Parts, to restore the Motion of the Blood  
' by Diluents, and to abstain from smart . Purges, aloetic Prepa-  
parations and Astringents; for these,. by irritating the Intesti-  
num Rectum, render this Discharge, whichinTometimes salu-  
tary and wholsome, hurtful and injurious. '.“j

Having said enough of -the Liver, I now proceed to take a  
View of the Uterus, a perfect Knowledge of which is of vast  
Importance in the Cure of those Diseases which are peculiarly  
incident to the Female Sex. The Uterus, according to the  
Discoveries of Anatomy, is likewise one of those Viscera which  
contains Blood, and which; besides its muscular and fibrous  
Substance, has a considerable Number of winding Vessels carried  
to it from the Hypogastric and Spermatic Vesseis. . Now since  
these Vessels are in various Places interwoven with and adhe-  
rent to each other, it must necessarily happen, that the Blood,  
especially when in too great a Quantity, must, by reason of  
. these winding Canals, make, its way, in a languid manner,  
thro' this Part. Hence we may reasonably conclude, that if  
the Blood stagnates there, and is not duly return'd thro', the  
crooked Windings of the Veins, very terrible Disorders must  
ensue ; for hence, as from a fruitful Source, proceed Effusions  
Of Blood, viscid Concretions of Blood, commonly known by  
the Name of Polypuses, and innumerable other Disorders,  
Hence likewise proceed frequent Miscarriages; hence Dropsies,

Tumours, Cachexies, Obstructions, and all the Train of Dis.  
orders peculiar to the Female Sea. t.

.. AS this is the Case, we may reasonably maintain, shat in  
these Disorders all such things aS retard .the Motion ofthe  
Blood are carefully to be Avoided,-such as Acids, Styptics, and-  
Astringents, because these Disorders are. exasperated .and in-  
oreased by such Medicines.. Those Medicines, on the other,  
hand, are Proper, which render the Blood) fluid, florid, and  
susceptible of an easy. Motion. Such Remedies are likewise  
proper as strengthen the solid Parts, that so the Vital Juices may  
the more speedily convey their benign and salutary Influences  
thro' the whole Body; to this Class belong Baths, volatile  
oily Salts, and balsamic Bitters jowhich Medicines, if used be-  
tithes, and .with proper Caution, .afford singular Relief in the  
above-mentioned Disorders. Allow me also to recommend  
Phlebotomy, which is an excellent Preservative against Abortion,  
and Other Disorders peculiar to that Sex. .

- I now come to consider how beneficial a strict and anatomi-  
eal Knowledge of the Structure: of the Spleen is in the Practice  
of. Physic. *D. Spigelius* long ago observed, and *Ruyfch,* the  
Glory and Ornament of our own Age, has proved by several  
Experiments,: that the Spleen is composed of a vast Number of  
Vessels, Veins and Arteries, which has induced some, of the  
Moderns to chink it almost a vascular Substance, and, as it were,  
a sanguineous Gland. Hence, we- easily see, that-the Spleen  
was originally, design'd for attenuating the thick Blood convey'd  
so it, that so it. might he transmitted in a purer and shore florid  
State to the LiVer. \*- These Circumstances being discovered, we  
cannot fall to perceive-what Injuries must ensue to Health from  
Its heing obstructed, hecoming tumid, or stuffed with Blood;  
because by these means a thick and Viscid Blood is from it con-.  
Vey'd to the other Parts, which, whilst it passes with Difficulty  
through the narrow Parts of the Vesseis, setties in them; and  
becomes the Source of Various Disorders. Hence 'tis to be ob...  
served in Practice, that in Disorders Of this Kind, ino Medicines  
are either so powerful, or so speedy in their Effects, das those  
which attenuate the Blood, Open the Vessels, remove Obstru-  
ctions, and strengthen the Tone of the Solids; for by these the  
languid Motion of the Blood is augmented, and its Circulation  
tarried on without Interruption. For attenuating viscid Blood  
therefore; the plentiful drinking of wholsome Water is Very  
proper;: and . the Reason is plain; why warm Baths, and Mineral  
Waters, are not-only useful, but of all other Remedies the most  
sovereign in Disorder’s os this Kind. Now as the Circulation  
of the Blood is assisted by .the Tone os the solid Parts, and aS  
tins Tone is proportionably destroy’d *by* the Distention of the’  
Vessels, it plainly follows, that gentle Astringents, such as  
Chalybeate, and what we commonly call Splenetics, are not to  
be neglected in Disorders of this Nature.

Among the Number os sanguineous Viscera we may justly  
reckon the Kidneys, the Knowledge of whose Structure, as 'tis  
highly useful in Practice, deserves our most attentive Consider-  
ation ; for .the Secretion of the saltish Serum depends entirely  
upon the free Circulation of the Blood thro' the Kidneys. Now  
that this Circulation is naturally Very expeditioufly performed,  
may be proved by two Arguments: First, the emulgent Arteries  
are not far distant from the Heart, near which the *Systole* of  
the Arteries is very strong. Secondly, the Fluids taken into  
the Stomach are Very quickly discharged by the Bladder. This  
principally happens upon drinking warm Liquors, such as Small-  
beer, and Infusions of Tea, and Paul's Betony,: aster plentiful  
Draughts of which, the Urine is Very soon discharged in great  
Plenty. All the Disorders then incident to the Kidneys, such  
as Exulcerations, Inflammations, Paroxysms of the Stone,  
Suppressions, imrhoderate Fluxes of Urine,' proceed from a  
Stagnation os the Blood. Hence the Physician may learn, that  
too great a Quantity of Blond, or a Plethora, is the Cause of  
these Disorders ; and that Phlebotomy must os Consequence he  
very proper for the Relief of the Patient, and the Removal Of  
the Disease. Hence we are also taught, that warm Baths,  
Mineral Waters, warm Infusions of Paul’s Betony, and Grounds  
ivy, and all other Medicines which attenuate coagulated Blood,  
are beneficial in Disorders of the Kidneys,

The membranous Parts of the Body likewise claim our par- “  
ticular Regard, since, heing endow'd with a most quick and  
exquisite Sense, 'tis os Vast Importance for the Physician to tin-  
derstand their Structure. The Viscera then, which principally  
consist of Membranes, are the Stomach, the Oesophagus, the  
Intestines, and' the Bladder. Now we learn from Anatomy,  
that such Parts as consist of Membranes, contain little Blood;  
but that they are furnished with a great many Branches of  
-Nerves, and fleshy Fibres, that so they may herb contract and  
dilate themselves For these Reasons they are very subject to  
Spasms: Hence the Blood, flowing (lowly thro’ the compress'd  
and obstructed Veins, easily stagnates, and produces the most  
fatal Disorders ; for from this Cause we find the most dangerous  
Inflammations arise, because the nervous Parts, on account of  
their incredible Connection and Communication with one an-  
.other, at once irritate and affect the whole nervous System ; so

that a Complication of very terrible Symptoms arc generally  
observed to accompany such Disorders, as acute Fevers,  
Watchings, Loathing os Food, Heat os the internal, and  
Coldness os the external Parts, Restlessness, Convulsions, and  
in some Degree Loss of Reason. Hence it likewise follows,  
that the more noble and valuable, the Part affected is, the more  
terrible and dangerous the Inflammation ought to be judged ;  
and that the Endeavours of the Physician to procure a speedy,  
and seasonable Relief, ought to bear a direct Proportion to the  
Weakness and Danger os his Patients. This Theory plainly  
demonstrates, .that, inorder to protect the Body against the  
violent Assaults of such a Disorder, all those Remedies are  
proper, which preserve the Tone and Strength of the solid Parts,,  
and are neither too astringent, nor too relaxing; among which  
I cannot help, recommending nervous Medicines, temperate  
Balsamics, .warm Infusions of Herbs, Volatile oily Salts, alexi-.  
pharmic Essences, *etc.* . In case of a Plethora, or too great a  
Quantity os Blood, Phlebotomy is also necessary ; and all Pur-  
gatives, Emetics, Styptics, and Opiates, are to be avoided.'  
Acids in Food, Viscid Substances, and such aS induce a Coldness  
of the Body, are likewise to the shunn’d, because, by stimu-  
lating the Fibres into Spasms, they augment the Disorder.  
But the Importance and Largeness of the Stomach calls upon  
me to say something particular upon its Structure ; one Pecu-  
liaritv of which is, that, in the superior Cavity of its LestPart,  
the Blood-Vesseis are defended with a Very thin Membrane,  
whilst at the same time their canons and Villous Membranes are  
extremely flender in the same Place. Hence a Reason may.  
plainly he assigned, why, in Hypochondriac Disorders, and Ob-  
structions. of the Spleen, these Vesseis, heing distended with  
Blood, should he easily burst, the Consequence os which is, a  
plentiful Effusion of Blood from the Mouth. These Vomit-  
ings of Blood, are also very: common to Women, for no  
other Reason than that the Blood, which should have heen.car-  
tied off by the menstrual Discharge, is retained; and heing  
convey'd, to the Stomach, first distends, and then bursts these  
Vessels. Moreover, the Bottom of the Stomach, and its infe-  
rior Orifice, together with the Duodenum, are cover'd with a  
Very, thick and villous Coat, which covers the .nervous sensible  
Coat I so that we have no great Reason .to wonder why these  
Parts of the. Intestines are endow'd with a less exquisite Sense  
than others, since Anatomy demonstrates, that the latter are  
entirely destitute of the above-mentioned Coat. This plainly  
appears to be the noble Result of exquisite Contrivance, and  
Unerring Wisdom ; for 'tis without Doubt intended to hinder  
the Bile and Aliments, which are principally lodged in these  
Parts, from irritating this nervous Coat, and thereby proving  
prejudicial to Health. Hence we may by this down as a Rule  
in Practice, that saline Purges, and gentle Openers of the  
Belly, are of no Use in Disorders where a Load of acid or  
bilious Matter is lodg’d in the Bottom of the Stomach; in the  
Duodenum, or the Beginning of the Jejunum ; for these Parts,  
being only endowed with a dull and heavy Sensation, resist the  
saint and languid Stimulus of such weak and ill-chosen Medi-  
dues.. But no Medicines are better calculated sor diflodging  
these remote and deep-rooted Sordes, than gentie Emetics ;  
for these, by the Sulphur, and subtile caustic Salt, of which they

‘ consist, penetrate the Tunica Villosa, or Villous Coat, and by  
stimulating the nervous Coat, easily excite Spasmodic Contrac-  
tions of the Parts; whence the Sordes, lodg'd within them, are  
drawn forth, as it were, by the Energy of the Medicine.

Whilst I am speaking os the Duodenum, it will not he amiss  
briefly to touch upon the more curious Circumstances *os* its

, Structure, which sew have aS yet sufficiently adverted to. Hea-  
ven then, whose Works are always perfect, has bountifully

. contriv'd, that this Intestine should resemble a little Bag, or  
Stomach, that so the Bile, pour'd from its respective Ducts into  
this Intestine, may remain the longer in it, and bv that means  
he the more intimately mixed with our Food ; a Circumstance  
which is absolutely necessary to Health. As this is the Case,  
it is not to he doubted but a great many Disorders proceed from  
this Intestine, if . too large a Quantity of Bile is lodged in it so  
and especially if thro’ the LanguidnesS os its Motion, and the  
Length os its Stay there, it becomes corrupt, and assumes a Vi-  
rulent. Quality. Certain it is, and I only affirm what I know  
.from Observation, that this Intestine, as above circhmstanc'd,'  
contains the latent Causes of many terrible Disorders ; for to  
it we may principally refer Intermitting,Tertian, Burning, and  
Bilious Fevers, Dysenteries, Diarrhoeas, and CardialgiaS.. In  
this Intestine also lurks that malignant Matter, which, heing  
afterwards tranflated to the Blood, occasions Small-Pox, Purple  
Fevers, and Disorders os various Kinds. Hence we may ra-  
tionally conclude, that no Medicines are more efficacious,  
.either for preventing these Diforders when dreaded, or remove-  
ing them when present, than gentie Emetics, whereby the  
Seeds of the Disease may be disiodglu, and the Sordes duly  
evacuated, lest they should communicate a Taint to the Blond.  
This Intention is also answer\*d bv nitrous absorbent Abstersives,  
which, act immediately on the Matter os the Disease, and break  
the pungent Spicuhe winch prove its Cause.

.. I should he guilty of an unpardonable Neglect, if in this  
Place I sail'd to take Notice of the Bile, that Humour so ne-  
cessary for the Welfare of the Body, and of which the Abun-  
dance loudly calls for our Admiration and Surprize, since in  
the Liver it is plentifully generated, and convey'd to the Inte-  
stines by two Ducts ; for which no other Cause can be assign'd,  
than that this Humour is absolutely necessary sor the Body,  
since it enters the Duodenum and first Intestines, mixes with  
the Chyle, and proves a proper Stimulus for discharging the  
Contents os the Intestines. Hence we learn, that-the Bile is  
vastly conducive to Health, and that its being either corrupted,  
or deficient in Quantity, produces various Disorders. Hence  
we also learn an useful Maxim in Practice, which is. That all  
those Substances are excellent Preservatives *of* Health, winch  
either recruit the diminish'd Bile, or restore its Temperament,  
and balsamic Bitterness. This intention is excellently answer'd  
by bitter Extracts of Wormwood, lesser Centaury, Carduus  
Benedictus, Extract of Aloe, and other Substances of a like  
Nature ; for as the Bile, in its natural State, strengthens the  
Motion of the Intestines, proves a proper Stimulus for the *Dis..*charge Of the Excrements, and incides the acid and viscid Hu-  
mours of the Body, and by that means preserves it from cold  
Disorders, we have no Reason to doubt, but that, in Cases of  
this Nature, Bitters, administer'd in .Conjunctions with Balsa-  
mice, are highly, proper and expedient For this Reason these  
Medicines are greatly beneficial in Cachexies, Dropsies, Hysteric-  
and Hypochondriac Disorders. .

υ It will not, on this Occasion, be improper to say somewhat  
of the Circulation of the Lymph, and shew what an Advan-  
tage the Knowledge of it mutt he to the Practitioner. We  
must first then consider, that the Lymph, or most thin **and**refin'd Part of the Serum, is secreted from the Arteries, con-  
vey’d by means of tho lymphatic Vessels to the thoracic Duct,  
and returned to the Heart, with, this View, that the Blood  
may he sufficiently attenuated by. a proper Fluid ; for we .  
learn, that our Bodies are supported and maintain'd thy a  
due and proper Quantity of Fluids ; and 'tis plain from Chy- -  
mica! and Statical Experiments, that our Bodies in the Com-  
plex contain eleven Parts of Fluid to one’that is Solid. Hence **a**Fluid must necessarily he the principal Element of the Blood,  
whereby 'tis preserved, and so diluted,fas to pass easily thro' the  
narrow Chaneis of the Vessels. Hence we must know, what  
Fluid, even when taken in .the greatest Quantity, must he  
conducive to Health, which must he .that, which is lightest,  
thinnest, and best calculated for mixing with the Blond. For  
this Reason a Physician ought carefully to inquire into the  
Qualities of different Waters, that fo he may know which are  
best calculated for the State of his Patient, and most conducive  
to Health Hence the Physician, must also perceive, that  
nothing, is so effectual for attenuating a thick Blood, as an  
Abundance of Fluids ; and that in the most obstinate Disor-  
ders arising from Obstructions os the Viscera, and Viscidity of  
the Blood, hot Baths, and Mineral Waters, afford the noblest  
Relief, provided they are liberally drank. .

The Anatomical Contemplation of the Lymph also teaches  
us, that its retrograde Course is perform'd with a great deal of  
Difficulty; for which Reason bountiful Nature has lent her  
ikilful Aid, and furnish'd the lymphatic Vessels with many  
bye Passages, whilst she has .at the same time sortisy'd. the con-  
globate Glands, thro’ which the lymphatic Vesteis pass, with  
nervous Fibres, that by their Strength and Impulse, the Course  
of the Lymph to the Heart may he the more readily performed.  
Hence *Nuck,* that ingenious Inquirer into the Structure of the  
lymphatic Vesseis, judicionfly compares them to Siphens. But  
is this Motion should prove languid ; if the Lymph should he  
Viscid, or the Strength defective, the Lymph itself setties about:  
the Glands, and obstructs them. Now if the Lymph should  
want a due Degree of Motion, it corrupts, turns Vapid, **and**lays a Foundation for a great many, and those Very terrible  
Disorders ; such as those, which, from an Impurity of the  
Lymph, deform and fpoil the Skin ; among which are Lepro-  
sies, Herpes, Pustules, Itches, Scurvies, and the Lues Ve-  
nerea. Having then found out the Cause of Disorders of this  
Nature, which without Anatomy we cannot possibly do, tho  
Physician is to endeavour to restore the Lymph to its Circu-  
lation ; or, in other Words, to open the obstructed GlandS,  
that the Motion of the Lymph may he increased. In a Coin  
therefore of this Nature, Bleedings, Purgatives, Absorbents,  
or Salts prove ineffectual, and more powerful Medicines must  
be applied ; such aS penetrate, whose Texture remains sound  
and entire, and winch, by stimulating the Fibres, open the  
Glands and Vesteis. The Mineral Kingdom supplies us with  
Medicines of this Kind, such as Sulphurs of Metals, Antimo-  
**nisi** and Mercurial Preparations, the wonderful Efficacy of  
which upon the Glands, and Motion of the Lymph, cannot he  
sufficiently extoll'd.

Is the free Circulation of the Lymph is prevented, especially  
from Obstructions of the Liver, the lymphatic Vessels first  
swell, and then break. Hence the Serum, beinH extravasated in  
Abundance, produces Various Species *of* Dropsies, which re-

teive their different Denominations from the respective Paris  
they affect: Whence it is eVident to a Demonstration, that  
these Disorders admit of a Cure with Difficulty ; for it requires  
no great Labour to shew how hard a Task it is to soften indu-  
rated Viscera, and consolidate burst Vessels.

I now come to consider the Brain and Nervous System, with  
a View to illustrate the extensive Use that an accurate Anato-  
rnical Knowledge of these Parts is of in Practice. And, indeed,  
the Antients called thefe Parts cold, not because they wanted  
'their proper Degree of Heat, but because, when compar'd with  
Other Members, they were furnish'd with a proportionably  
smaller Quantity of Blood. Besides,. the Substance of the  
Brain is of itselfwoid of all Sensation : hence it plainly appears,  
’that the *Deficiency of the Blood has a very considerable Influence  
upon those Parts,* since in Bleeding, or where a large Hae-  
morrhage happens, we observe the Patient to saint away, which  
is a convincing Proof, that by that means the Nourishment, as  
It may be called, is drawn away from this Part. Hence we  
learn, that warm Medicines are particularly beneficial in Dis-  
orders of the Brain, because, by strengthening its Membranes,  
they occasion a quicker and more expeditious Circulation of  
the Blood thro'it. For this Intention Cephalins, as they are  
commonly called, are deservedly commended ; such as Oils  
distilled from aromatic Herbs, apoplectic Balsams, and Volatile  
oily Salts ; for if the Membranes of the Brain are not suffici-  
entry strong, the Blood is easily retained in them ; and hence  
-very terrible Disorders arise, such aS Apoplexies, Loss of Voice,  
Melancholy^ Difficulty of Sight and Hearing, Gutta Serenas,  
'Incubi, frightful Watchings, Sleep, Disorders and Diminu-  
lions of the several Senses and Motions of the Body... But aS  
'Corroheratives are excellently calculated for the Cure of these  
Disorders, fo. no Medicines are more fetal;to the Brain than  
those which induce too great.a Relaxation, Coldness, or Hea-  
viness upon 'it. Of this Kind are all Substances that abound  
in Vapours, aS moist Ain, too much Sleep, the Affections of  
the Mind, and especially Sorrow, together with all such Things  
as strike the Nerves of the Head with their sulphureous Efflu-  
via ; such as Opiates, Narcotics, as also Acids; refrigerating  
Medicines, and antninnal Fruits. \* In these Disorders, on the  
Other hand. Volatile, oily, and balsamic Salts, are beneficial; the  
principal os which is my liquid Balsam, which since 'tis com-  
pos’d of the best and most genuine Oils; scarcely to be found  
in any other 'Coinposition, affords a surprising Reuef in Disor-  
ders Of the Brain and Nerves. In Disorders, therefore, which  
Proceed from Obstructions of the Head and. Nerves, such as  
a Palsy, I must for the same Reason recommend balsamic  
/Medicines apply'd externally, not so much to the affected Part,  
‘as to the Origin of the Nerves, .and the Nape of the Neck. .. -  
' I shonld now handle the Doctrine of the Nerves at large,  
did I not think it sufficient’to touch upon it on this Occasion :  
"and without Doubt, if a Physician lies under Obligations per-  
dectly to know any Part of Anatomy; 'tis certainly that of the  
wondersol Structure and Consent osthe Nerves ; for unless he  
I knows this; he can never discern whence any given Series os  
Symptoms draw their Origin; nor what Disorders affect only  
:by Consent.. Whence the many Errors 'that might flip into  
"Practice, may he easily conceived; for this is to he .laid down  
’as a general Caution, that, the Cause of the Disease is to be  
'removed, and that the Physician goes preposteroufly Io work,  
-who being ignorant of Anatomy, .and overlooking the Cause,  
'directs his Views only to the Symptoms. Now the Reason or  
Cause of these Symptoms is no Other than4 that the hervotis  
Parts are intimately connected with one another, - whence their  
surprising Consent arises ’, for Itis certainly wonderful, .that  
when one nervous Part shonld he disturbed, the whole Body  
should, in Consequence of it, 'he affected. Thas fromintense  
Pains, even of distant Parts, from a wounded Nerve or Ten-  
don; froth the Stone,- the Colin, or Iliac Passion,' proceed Fe-  
vers;-Deliriums, Convulsions, find some other.inost Terrible  
-Disorders.- - ' ' '. . sr- - ' .

The intercostal Branch, andsthe eighth Pair of Nerves, rim  
almost thro’all- the Parts of the Body ; whence it generally  
’ happens, that Vomitings, Diarrhoeas, Asthmas, -Constipations  
-of. the Belly;. Suppressions Of Urine," a Difficulty of'Breathing,  
and a Pain in the Breast, succeed Disorders Of the Head; Apo-  
-plexies, -Epilepsies, or Contusions. The same happens InHy-  
" pochondriac orHystericDisorders ; for if, in this Case, the mer-  
. -vous: Foldings of the Mesentery, and the Nerves of the Stomach  
--and.Lungs, shonld happen -to be distorted hy Flatulencies, or any  
acrid Matter, Suffocation, Palpitation .of the Heart, Vertigo,  
Pain of the Head, Fainting, Pain of the Neck, Asthma, Cata-  
'sepsis; and Convulsions,- threaten the Patient. Now the Physician  
would do nothing, who, only taking the Symptoms into Confide-  
“ ration/shonld prescribe Remedies againstthese Disorders; where-  
as, if the real Cause was once throughly known, inch a Com-  
..plication of Disorders might often he removed by a single  
carminative-Clyster, or an - antispasmodic Medicine. With - a  
- Paroxysm of the Stone are frequently join'd Vomitings, the  
- Colic, Stupor-of she Thigh,-Retraction of'the Testes, and  
"what -is-still more remarlable,-Epilepiy, - and an uncommon

Pain os the Breast ; for which Symptoms no other Cause can  
be assign'd, than that the intercostal Nerves, and those of the  
eighth Pain, are inserted into the Bladder and Kidneys. Over-  
looking Symptoms then, the Physician is to make it his chief  
’Business to remove the Pain of the Stone, which heing once  
done, the other Disorders will disappear with it; for which in-  
tentioh Baths, oily Ointments, and gentie Anodynes, are to  
be prescribed, thet by relaxing the Passages the Pain may he  
mitigated or removed. Equally necessary is that Observation  
concerning Worms, which, if lodg'd in the Intestinum Ileum of  
Children, corrode its Membrane, and produce Spasms and  
Convulsions : Which Symptoms will nevertheless easily cease;  
if the Physician makes a right Judgment of the Couse, and eri-  
deavours to kill the Worms by proper Anthelminthics. Intense  
Pain, Tenesmus, Loathing of Fond, Watchings, and cold  
Sweats, often succeed an Erosion of the Bladder from the Stone.  
If by the Assistance of Anatomy we are directed to the Cause  
of this Distemper, it will.eafily appear, that in order to remove  
its concomitant Symptoms, the Physician's first and principal  
Care ought to be placed in removing the ’Stone, which is best  
and most effectually done by oily and balsamic Medicines ; or,  
if the Case is very urgent, by extracting the Stone by a skilful  
Hand; . E . . si

z ’ It would be tedious to mention the other Parts which are sub-  
jected to the most violent’Torments, in Consequence of the  
incredible Connection and Communication of the Nerves : It  
will not, however, be improper -to say something upon this  
Head; The most violent Disorders then, such as Diarrhoeas,  
-Coughs. Fevers, Constipations of the Belly, Heaviness about  
the Breast, Convulsions, and other Disorders, accompany the  
‘Tooth-ach, and difficult Breeding of Teeth in Children ; but  
these Symptoms,- when they are not Very violent, immediately  
remit, upon the Pain being allay'd, .or the satrlty Tooth pull’d  
out, which was the Cause of the Disorder: But 'tis surprising,  
what racking Pains accompany an Inflammation os the Sto-  
mach ; because, this Part, having very considerable Nerves,  
affects at once the whole Body. Hence by taking Poison, or  
thy some acrid Matter lodging in the Stomach, intolerable  
Heart-burnings, Deliriums, and Uneasinesses, which in the Issue  
-prove fatal, are produced; the internal Parts, but especially  
. the Region of the Breast, are burn'd as it were in a Flame-;

the external Parts are cold, and the Pulse unequal ; which  
'Symptoms, as they are very terrible and dangerous, may justly  
alarm the Physician ;-yet they disappear, if the State of the Sto-

. mach is duly adverted Io, and .the Poison thrown out by means of  
Oil or . Milk, or the Acrimony of the .Matter destroy'd by

4proper Remedies. .Nor is this.less subject to happen inWounds  
. of the Tendons ; for sometimes: a Train of Disorders are the

Consequences of a wounded Finger or Toe," or a Corn unfitil-  
fully cut; for then Cynic Spaims, Convulsions, Pains, and  
other Symptoms, afflict the Patient, and .put him in the highest  
Danger ; but the Fury and Violence of the Symptoms remit,  
if, by a seasonable Remedy, the Pain of the Nerves is mitigated.-

. , In the Hysteric Passion, that Disease pechliar to the Female  
' Sex, the Patients sell down as if they were Thunder-struck, or  
in an Apoplexy, since on account of the Nerves of the eighth  
Pain, and the Par Vagum, winch are inserted in theUterus, the  
Membranes of the Brain are at the fame time seiz'd with Spasms.  
-But, not to mention other Disorders, which in this Disease  
-assiict the tender sex, .they all proceed from no other Cause  
-than this, that the Nerves are carry'd in one uninterrupted  
. Course thro’ the Whole of the Body.- .

-From this surprising Consent of-Nerves, we are often to  
/account for the Diseases, in which the Bro is Justly-accused as  
"faulty *r,* .for as the hepatic Congeries of Nerves, which goes to  
/the Gall-bladder, passes also thro' the pylorus, the Pancreas,  
-andThe Duodenum. ; the Reason is plain, -why,-the Stomach  
being irritated, .the Bile should be discharged both from its  
"Ducts and Cystis ;; and .why the Jaundice stimulates and-pro-  
'yokes thefitomach itself to Nausea and Vomiting. ‘

i There is also a great ‘Consent- between the Bladder and Dre-  
1 ters, hecause the lame Nerves pass thro' these Parts in one un-  
Interrupted Course.'' Hence if the Beginning of the Ureters ts -  
'afflicted with a Stone or Spasms, there very often happens at  
The same time a Suppression osDrine; a:Strangury, and a fruit-  
YIess and ineffectual Endeavour to make Water. i : v - -  
- But enough ,on the Consent of the Nerves, .which; if every  
i thing was to she suggested, would1, detain us too. long χ The  
’ Physician sir the mean while may profit fo fin fromsthis, as to be  
'able to distinguish the Cause from the Symptoms-of .a Disease.

If any one desires to read more upon this Subject, he inay con-  
sult that excellent Writer, *Vieujsieus,* who .has laid down **the**'Doctrine of the Nerves at greater Length. Tho' alLThaye  
advanced has a most 'direct Tendency to shew ine Use of Ana-  
tomy in Practice, *'yet* ifI was to launch out into' Surger}’,  
‘ .'Anatomical. Knowledge would still he found more beneficial to  
'it : Tor the Effects of Surgery are the most evident es ahy in

. Medicine; whereas in .the Cure of internal Disorders there as  
' at least a Possibility os doubting whether the Cure be performed  
“ htr the Benefit of -Nature, or the Virtues of the Medicine. But

in that Branch of the Art, by which Cures are performed by  
the Surgeon's, it is evidently and immediately perceptible to  
the Eye, that the Patient receives Assistance from his Hand.  
\* Hence it easily appears how great Praise a practical Physician  
may reap from the joint Knowledge os Anatomy and Surgery.  
I shall at present add no more concerning the Use os Anatomy  
in Surgery, fince the Subject is os such Importance and Extent  
as to deserve a more particular Discussion. *Hoffman Medicina  
Rationalis Systematica, Fol.* 6.

*Hoffman,* tho' no inconsiderable Writer, has, however, in  
the preceding Dissertation, given a Very confus'd Account os  
the Practice of the Antients. Is amongst, these he includes  
*Hippocrates,* he has done him great Injustice, by charging him  
with using too copious a *Materia Medica,* with a Neglect os  
gentle Laxatives, and with all the Errors and Dreams os later  
Physicians, who built their Theories upon the Peripatetic and  
Chymical Philosophy.

*The* **HISToRY of ANATOMY.**

With respect to the Antiquity os Anatomy, it seems scarcely  
possible, but thet the Slaughter os Beasta for the Use os Man,  
Casualties, Murders, and the Accidents of War, must have,  
furnished Mankind with a general Knowledge of the Structure of  
the Parts, in very early Ages of the World. But it is not Very  
certain at what Period it began to be cultivated aS a Science.  
This, however, must have been Very early, especially if we  
pay any Regard to *Manetho,* the famous *Egyptian* Writer, who,  
according to the Report of *Eusebius,* relates, that *Athotis an  
Egyptian* King wrote some Treatises of Anatomy. This King,  
if the *Egyptian* Chronology was to be depended on, liv'd many  
Ages before *Adam.* This, however false with respect to Time,  
amounts to a sort of Proof of the Antiquity of the Science I  
am speaking of

It is inferred, that *Solomon* was no Stranger to the Structure  
Of the human Body, from a Passage in the twelfth Chapter of  
*Ecclesiastes,* which is thus :

*Remembcr nowlhy. Creator in the Days of thy Youth, while  
the evil Days come not, nor the Years draw nigh, when thou stale  
fay, I have no Pleasure in them ;*

*While the Sun, or the Light, or the Moon, or the Stars, be  
not darkened,'rtor the Clouds return after the Rain :*

*In the Day when the Eeepcrs of the House shall tremble, and  
the strong Men stall bow themselves, and the Grinders cease, be...  
cause they are few, and those that look out of the Windows be  
' darkened t et ...*

*And the Doors stall be shut in the Streets, when the Sound  
. of the Grinding is lows and he stall rife up at the Voice of the  
Bird, and all the Daughters of Music stall be brought low ; k*

*Also when they stall be afraid of that which is high, and  
Pears stall be in the Way, and the Almond-tree stall flourifit,  
and the Grajhopper stall be a Burden, and Desire stall fail c Be-  
cause Man goeth to his lang Home, and the Mourners go about  
the Streets :*

*Or eucr the Silver Cord be loosed, or the Golden Bowl be  
broken, or the Pitcher be broken at the Fountain, or the Wheel  
broken at the Cistern*

*Then stall the Dust return to. the Earth as it was ; and the  
Spirit stall return unto God, who gave it.*

It is evident, that *Solomon* is describing figuratively the Decays  
. of the several Parts, winch happen in old Age. But the whole  
Passage is too enigmatical to determine how far the Author was  
acquainted with the Structure of the Body.

ἐν. It is Very certain, that before, or, at least, in the Days of  
*Homer,* Anatomy was much cultivated, since this Author  
appears to have had a competent Knowledge of the Parts, and  
to heve heen Very well Vers'd in the *Renunciation of* Wounds,  
as the Moderns call it, so as to give an accurate Account of  
their Effects in almost all Parts of the Body.

But *Hippocrates* is the first Author at least extant, who  
treated os Anatomy scientifically. This divine Writer, con-  
scious of hisnoble and exalted Genius, published many Anato-  
mical Observations, which, tho' disjoin’d and scatter’d hereand  
-there in his Works, yet make up an entire Body of Ana-  
tomy, when.. taken together ; But that he made it his prin-  
cipal Bufiness to understand and explain the Bones of the human  
Body, is plain from those Valuable and well-wrote Books upon  
Fractures, and the Joints, which evidently discover his perfect  
Knowledge of, and intimate Acquaintance with, the.Bones;  
and that his Diligence, his Industry, and Skill in this Way,  
might the more effectually he transmitted to future Ages, he  
.consecrated, if we may believe *Pausunias,* a brazen Skeleton  
**. to** the *Delphian Apollo.* -i

The Writings of this great Man are interspersed with many  
. Things relating to the Blood, which as they seem to shew his  
Knowledge of its Circulation, and also of the Secretions of  
ς the Humours, Dr. *Douglas* has pointed out such of them as  
seem to he the most glaring and unexceptionable- Proofs of this  
Point. " '

The first of , these Passages runs thusss Sdur *Veins diffused  
thr^ the Body supply ii With spirit. Fluidity seespea, and Mo-*

*tion, whilst many of them branch out from one.* But 'tis to  
be observed, that by Veins *Hippocrates* in this Passage means  
Arteries.

. The second is in his Book *de Alimento: The Liver,* says he,  
*is the Root of the Veins, and the Heart that of the Artcries ,  
from these the Blood and Spirits stow, ana tbrti these the Hint  
is diffused.*

The third is in his second Book *de Morbis : And if he reco-  
ver, or get the better of his Disease, so that the Blood becomes  
warm, whether of itself, or by means ofsuch Things as are a de  
ministred; it ferments, is attenuated, and put into Motion,  
carries Spirits along with it, des.pumates itself, and is separated  
from the Bile, and so the Patient becomes sound.*

And again. *Bitt,* says he, *whilst the Blood does not move, it  
cannot be but the Body must remain in a State of Past and Slug-,  
gijhnese* ; 'and a little after. *If the Coldnes. and Coagulation of  
the Blood are perfect, the Patient dies.*

The fourth Passage is in his second Book *de Diata i For  
the Blood being warnsd and attracted, those Things which are in  
the Body perform a quick Circulation,* [περίοδον] *and then the  
rest °f sue Lode is purg'd by means of the Spirits ; then that  
which is compact, becoming warm, is attenuated and eliminated  
from the Body Ahed the Skin, and this is called a vtarrn Sweat :  
And after this Excretion, the Blood is restored to its natural .  
State, and the Fever remits.*

The fifth Passage is in his *Pook.de Insomniis: All these Sym-  
ptoms, appearing, are the Signs of Health, and that the Body, ,  
together with all its Ingestions and Secretions,* [ἀποκρίσσ.ςτ *are  
found.* And again. *But Rivcrs, nat flowing in their usual Man.,  
ncr, may be compared to the Circulation of the Blood,* [αῖματος  
περίοδον] *when they ffvcrsioW their Banks, they resemble the Ex-  
cess ; and When they cease to sill their Chanels, they resemble the  
Deficiency of the Blood.*

The sixth Passage is in his first Book *de Diata t For when  
the Circulation is flow, the Senses are last by little and little, and  
those who are most acute are a little put out of Order, by reason  
of the Slowness ofthe Circulation.*

The seventh is in his Booh *de Flatibus s For the Blood  
itself, being naturally warm, and propel?d by a certain Force,  
cannot soon make its Way thro3 a narrow Pajsiage, since it may  
meet wsth many Letts and Hindrances, whence Fevers, Pains, and  
other Disorders, arise.*

. These Sentiments savour very much of the modem Theory  
of Fevers, arising from Obstructions of the Capillary Vessels.

. The eight Passage is in his Book *de Morbo Sacro .. The Spirit  
rests, the Brain is compressed, and the Blood smn) standsstill.*

Many Pairages, enumerated at large by *Job. Ant. grander  
Linden,* in a Treatise intituled, *Hippocrates de Circuitu Sangui-  
nis,* might be subjoined to these ; from which we may infer,  
that he had some Notion of the Circulation of the Blood.

Thus sar Dr. *Douglas.* It cannot he doubted but *Hippo.,  
crates,* and all the Antients, knew that the Blood circulated ;  
but it is certain, that they did not know how, or in what  
manner, the Circulation was performed; this Discovery being  
reserved for the great *Harvey.*

It would be superfluous to give a particular Detail of the -  
Anatomy of *Hippocrates* in this Place; because whatever is  
remarkable, is taken Notice of under the respective Articles to  
which they belong. I must, however, observe that *Le Clerc is*sar from thinking, with Dr. *Douglas,* that all the Anatomical  
. Observations dispersed in the Works of *Hippocrates,* amount to  
an entire System. He says, .that it is no easy Task to give a  
.just Extract of the *Anatomy* of *Hippocrates.* Three things con-  
I cur to deprive us of-the Light that were to he desired in this  
Point. In the first Place, there are several Contradictions in  
. whet *Hippocrates* has wrote upon this Subject, or rather in the  
.Books ascribed to him aS their Author. Secondly, though one  
.should collect all that he has said concerning each Part, yet still  
it would amount to nothing complete or coherent. Its fine, tho\*  
so many Faults had not crept into the Text, or tho' there were  
. less Variety in the original Manuscripts, yet his Style is .so con-  
else, and some Passages in him are so obscure, and conceived in  
Terms so peculiar to himself, that 'tis not always easy, even  
for the greatest Masters *of* the *Greek* Language, to comprehend

.his Meaning. I

- For these Reasons, one might justly lament the Loss of a  
.Book wrote by *Galen* on *atid Anatomy of Hippocratis,* were not  
.this Author to be suspected, on account os his Partiality, with  
. regaid to that antient Physician : Instances of which, even in  
/point of Anatomy, are to he met with.

1 The Assistance which, upon this Occasion, one might expect  
, from Translators, and modern Commentators, is also Very in-  
1 considerable :. If any Light Is to be got from them, we ought  
. to depend less upon these of the present, than those of precede-  
.. ingAges ; since 'tis to he dreaded, that the former, full of their  
.new Discoveries, imagine they see them eVery-where; falling  
' into the like ridiculous Error with chose who find in *Hamcr*. the most exquisite Delicacies, and refin'd Improvements of all  
the Arts and Sciences; or into the still more, unaccountable  
\ Enthusiasm of Others, who find the *Philosopher'sS tone* in all

the Books of the Antients; whatever the Subjeci handled should  
happen to be. ...

It is remarkable, that *Hippocrates,* in his Treatise *de Locis in  
Hamine,* fays. *That the. Nature of the Body is the Principle, or  
Foundation, on which allmedicinal Reasoning ought to be supported.*But in his Book *de Prisca Medicina,* there is a Passage which  
appears to be contradictory to the preceding: *Some Phystcians,*says he, *and seme Philosephen, affirm, that one cannot be Master  
of the medicinal Art, without knowing what Man is, what his  
past Formation, and the Manner in which his Body is composed,  
are. All that thefe Men have staid, or Wrote, concerning the  
Body, seems to me rather to belong to the Art of Painting than  
to that of Medicine ; and I am persuaded, that one cannot have a  
more distinct ssmowledge of the Nature of the Body, than by Medi-  
cine, as those who are Masters of that Art mast eastly perceive.*

Thefe Passages, tho’ seemingly inconsistent with each other,  
are, in my Apprehension, however, to be reconciled. It ap-  
pears by many Passages in *Hippocrates,* that some Philosophers,  
in his Days, set up for a Knowledge in Medicine, merely upon  
the Strength of Hypothesis, and the Dreams of Theory, sup-  
ported, in their Opinion, by the Structiire of the Parts, with-  
out consulting Nature, and her Method of operating. Instead,  
therefore, of observing diligently how Nature really acts in pro-  
ducing and curing Diseases, they determined, a priori, how she  
necessarily must act, according to their Principles, which they  
seem to have taken for granted. In this last Quotation, then,  
our Author has there Philosophers in view, and their Abuse of  
Anatomy ; and, indeed, there seems a great deal of good Sense  
in what he insinuates, which is, that Anatomy, supported by  
Observation, lays a noble Foundation for rational Medicine ;  
whereas all rash Conclusions, drawn from the Structure of the  
Parts, before Experience has confirmed them, are at best preca-  
rious, and generally pernicious to the Practice of Physic.

*Democritus* was cotemporary with *Hippocrates:* With re-  
speft to his Knowledge of Anatomy, we learn no more, than  
that when,the People of *Abdera* called *Hippocrates* to cure him  
Of a supposed Madness, this Physician found him dissecting Ani-  
mals, in order to discover the Caufe of Madness, which he ap-  
prehended had its Residence in the Bile , upon which *Hippo-  
crates* reported to those who employ’d him, thet *Democritus*was not only in his Senses, but was the wisest of Men,

*Diogenes Laertius* gives the Tide of a Book wrote by *Demo,  
tritus,* whicti should seem to be Anatomical, as it is *Of the  
Nature of Man, or of the Flese. . , .*

*„ Pythagoras,* according to the Report of the fame *Diogenes  
Laertius,* had some crude Notions of Anatomy, which are not  
Of Importance enough to relate, since they are drawn from  
Speculation more than Reality. ' i

*Efnpedecles,* a Scholar of *Pythagoras,* as we learn from *Galen,*had some very singular Notions of the Structiire and Uses of the  
Parts of Animals; for he imagined, that certain particular  
Parts of their Bodies were contained in the Seed of the Male,  
and others in.that of the Female; and thet, from this Circum-  
stance, the Venereal Desires of both Sexes were to he accounted  
for; foolishly imagining, that the Parts, thus' separated, had  
a natural Tendency io join, and he again tainted with, each  
.other.’ . ς :... . - 'Ἴ -ςς

With regard to Respiration, he thought it was performed in  
this manner.: *As seen,* said he, *as that Humidity, of which there  
is great Store an the first Formation of the Foetus, begins to be  
diminished, the Air, instnuating itself thrV the Pores of the Body,  
succeeds ire Apter that the natural Hiat, by. its Tendency to moke  
cits Escape, drives the Air. aut, and when this natural Hiat en-  
ters the Body again, the Air follows itofrasc. The former of these  
Actions is called Inspiration, and the iatterE aspiration,* The  
Foetus, according to this Philosopher; inspired in the Belly 6f  
cheMother. τ '. ί. ss.‘ ” ,-ῖτ

The Sense of Hearing was, according to him, excited fay  
the Air striking on theInner-side of the Ear, which is wreath in  
in form of a Shell, anil fixed to.the most elevated Part of the  
Body, as it- were like a small Bell, which was sensible of all  
the Undulations and Impulses of the Ain which should enter is.„  
: The *. Plesa* was, according to him, composed of. afi equal  
Portion of the four Elements. The *Nerves* consisted of Fire,  
Earth, and two Parts of Water: The Nalls were formed by  
the Extremities of the Nerves, cool’d and harden’d by their  
.Contains with the ambient Air. .The Bones appeared to him to  
.be compared of equal Parts of Water and Earth ; or, at least,  
he thought, that these two Elements predominated over the  
other two in their Composition. Sweat and Tears he'took to  
be Blond attenuated, and rendered thin. . । ... . ,

The Seeds of Plants he esteemed analogous to the Eggs of  
Animais, which drop at the Time of their Maturity.

*. Alcmaeon* of *Crotona,* whe.was also a Disciple of *Pythagoras,*deserves to heve his Name handed down to future Ages, if, as  
*Chalcidius* in .his Commentaries upon the *Timaeus of Plato,*assures us, he was the first who dissected Animals, in order to  
. know the Parts of which their Bodies consist *i* But Time having  
. robbed us of his Writings, we know no more of his Anainm.y

than what we find in some antient Authors; and even what we  
meet with in them, seems rather to relato to Physiology than  
Anatomy. He imagined, that the Senfe of Hearing was occa-.  
stoned by the Ears being hollow within; and that all hollow  
Places resounded when any Sound enter’d them"; and that Goats  
breath’d partly by their Ears. ...

... With regard to the Sense of Smelling, he maintained, that  
the Soul, of which the principal Part is, according to him,  
lodged in the Brain, received the Smells drawn in, in Respira-  
tion. He imagined, that the Tongue distinguished Tastes by  
its Humidity, its moderate Heat, and its Softness. He thought  
the Sced was a Part of the Brain; and that the Foetus was  
nourished in the Womb, by drawing a Supply at all the Parts of  
the Body, which is externally porous like a Sponge. , Health, in  
bis Opinion, depends on the Equality of Heat and Dry nest, of  
Coldness and Humidity, and even of Sweetnefs and Bitterness;  
and other sensible Qualities. Maladies, on the other hand, he  
thought arose, when one. of these Qualities predominated, and  
bythat nreans broke the Union and Connection.

Thet *Agrst.ntde.* .applied himfelf diligently to Anatomical Stu-  
dies, is sufficiently plain from his Writings ; for they abundant-  
ly convinco us, that he does not relate every thing on the Au-  
thority of others, but that he was an immediate Spectator of  
them j jtho, in, his Days, Dissections of,the human Body were  
very rare and uncommon. It must, however, be owned, that  
he borrowed many things from *Hippocrates,* which will not fail  
to appear, upon comparing the two Authors together: But  
*Hieron. Mercurialis* affirms, without Reason, that he borrowed  
all his Sentiments on Anatomy from others. . .

*Alexander* the Great, whose Preceptor *Aristotle* was', being  
desirous to know the Nature, and different Properties, of Ani-  
mals, ordered him to hand hisThoughts that way; and for thet  
Purpose furnished him with eight hundred Talents, which  
amount to about a hundred and fisty-five thouiand Pounds sterl-  
ing. Thet Prince supplied ham alfo with several Thousands of  
Men from the different Quarters of *Greece* and *Asia,* who had  
Orders to obey him, to communicate to him all they had learn rd  
from Hunting and Fishing, and even to nourish and bring up  
all forts of Animais, with no other View but to discover the  
Pecularities of each Species, and communicate them to him.

One might justly think, thet, with so considerable Assist-  
ances, *Aristotle* should not have sailed to produce something very  
exact and accurate upon this Subjedt *, and yet* even the Antients  
observed, that he had-advanced several things contrary to Truth.  
He maybe excused,; in this Point, by saying, thet, in this Cafe,  
he was obliged to rely on the Authority of others, since he  
could not possibly fee and do every thing himself. But suppose  
he had been obliged, on fome Occasions, to rely on the Rela-  
tions and Accounts of these Men; for Instance, in what relates  
to certain Properties of .Animals, discovered by clrance i yet  
.there are other Occasions, on which he must have been an  
Operator himself, or,, at least, must have been present,.and  
given Directions to another. Of this Kind are the things  
relating to Anatomy. What Quinton, then, must.we have of  
rhe Accuracy of this Philosopher, when we find him maintain-  
ing, that all Animais have their Necks flexible,., and consisting  
of Vertebrae, except Wolves and Lions, whofeNecks, he says,  
consist of one Bone ? What Notion shall we also entertain of  
him, when he assures us, thet the Rones of Lions, contain no  
.Marrow ? a thing contrary to. all the Experiments.that here  
hitherto been made. The Curious may consult the learned *Bor-  
urichius,* wish reward tothe other Errors into which *Aristotle*shas  
sellen, in respectof the Anatomy of the Lion,, the Eagle, and  
.ike Crocodile. *Ariestesle,* however, has had Errors laid to his  
Charge, of.whicti.he never was guilty. Those, for Instance,  
.who published, the Account of a Dissection of a Lion, at *Paris, in*-the Acedemy of Sciences, shave also been at some Pains to point  
out the Blundersof this Philosopher, with regard to the Anatomy  
.of that Animal ; and all they advance, on that head, may-podur  
. bly be true ς bus, -in one, Passage,. they .seem. to make *Aristotle*say what he never so much as stream'd of. We find these Words  
Iin his Book *de Pstystognomla: ppedursus api-pel* τ\*ν *si fas dardureae*τελειώτατα μετειληφέναι της τοῦ ἀῤῥενος ιδέαστ Which the *l-xtin*Interpreter, transiates thus,: *Pistetur Lia omnium animalium per-  
foctistimurn animalsuAssetrneaia marisforrnatn.* Here *Arissotlela*- Words are explained as if be means, that , the *Hie-Lion has, so*. they *of Eminence, and beyond all other Animals, the. visible and  
apparent Maretofstois Syxs* Thisus -the Interpretation of these  
' Gentlemen, and; in order to prove that *Aristotle* was mistaken,  
. they add, that the Urethra of the Lion, that is to say, rhe Canal  
. of his Pemi,' together with heLigaments, .appears externally to  
he only three Inches and inn half, in Length: Their Conclusion  
had been just, if *apijlotle,* as they, and *Bor'risoius* imagined,  
had means, than the Lion, of all othej, Animais, has that Part  
. which distingnisues the Bex the largest,' and most apparent: Bin,  
' in my Opinion, this . was not *fo* much as in bis Mind ; and, T  
believe, he meant no moth, than thet. the Lion does, of all  
other Male Angniab, distinguish himself the most , easily from  
"the Female, hy .a grand mid masculine Ar peculiar to himiels

**- J**

I tranflate the *Greek* Word ἰδέα by the *English* Word *Air,* or  
the *Latin* Word *Species,* which precisely corresponds Io the  
*GreeFWsord.*

The several Dissections which *Aristotle* made of the different  
Species of Quadrupeds, Birds, Fishes, and Insects, taught him  
many things concerning the Uses of the several Parts of each  
Species. 1 shall not, here, examine every Particular he ad-  
vances upon this Head, or upon the Differences that are found  
among these Parts, and their respective Uses ; but I shall give  
his Sentiments, with respect to the Construction and Uses os the  
Parts, winch are common to the Animals commonly called  
perfect, such as Man and Quadrupeds.

*Aristotle* looked upon the Heart as the Source and Principle  
of the Veins and Blood. The Blood, says he, passes from the  
Heart into the Veins; but he says, that it comes from no Part  
to the Heart. He moreover maintained, that two Veins pro-  
ceeded from the Heart, the one from the Right Side, which is  
the larger, the other from the Left, which is lesser, and which  
he called the Aorta. Here 'tis proper to observe, that this Phi-  
Iosopher, according to *Galen, (de Venar, et Arteriar. Dissect so*was the first who gave this Name to the great Artery; which  
proves, that *Hippocrates’s* fourth Book *de Corde,* where this  
Word is found, was not wrote by him. *Aristotle* thought  
that these two Veins convey'd the Blood to all the Parts of the  
Body. He also imagined, that there were three Cavities in the  
Heart, which he calls Ventricles. Of these three Ventricles,  
that in the Middle, the precise Situation of winch he does not  
determine, is, according to him, the common Principle of all  
the rest, tho'.st be the smallest ; the Blond which it contains is  
also the most temperate, and most pure. The Blond of the  
.Right Ventricle is warmest, that of the Lest coldest; and this  
last Ventricle is the largest of the three. All these Ventricles  
have a Communication with the Lungs by Veffeis, which are  
.quite different from the two great Veins already mentioned,  
- which Veffeis distribute themselves thro' all the Substance of the

Lungs.

*Aristotle* not only made the Veins, or Blond-veffeis, but also  
the Nerves, to derive their Origin from the Heart; and he  
founded his Opinion upon this, that the largest of the Ventricles  
of the Heart, according to him, contains small Nerves: The  
Vein which he calls the Aorta is nervous, and is lrsels like a  
true Nerve towards its Extremities, since it has no Cavity, and  
is stretch'd Out in the same manner with Nerves, where it ter-  
minates near the Articulations of the Bones. He also maintains,  
that there are a Number of Nerves in the Heart, and that they  
are of singular Use there, since its Contraction and Dilatation  
depend upon them. He seems, in this last Passage, to mean the  
Tendons or Fibres which contract and dilate the Heart; and if  
*Hippocrates* confounded the Nerves with the Tendons and Liga-  
ments, it does not appear, that *Aristotle* better distinguished  
these Parts, nor that he knew the Use of the real Nerves. He  
maintains, that the Nerves are not continued like the Veins,  
.hut that they are scattered here-and-there, and distributed to  
the Parts where the Articulations are; ‘by which 'tis plain, .that  
he still means the Tendons. Tf he had understood the Use of  
the Nerves, he had never asserted, in another Ralsage, that.no  
parte, but such as contain Blood, were capable os Sensation ;  
and he would never have maintained, as he does, that the Flesh  
is the proper Organ of Sensation. AS for Motion, *if* he ascribes  
it to the Nerves, it is evident, that the Nerves-he means are also  
Tendons or Ligaments. -- ' po ’ - - . - S-T -

The common Principle of Motion and Sensation is, accord-  
ing to *Aristotle,* lodged in the Heart; whichhe makes -to  
he the Principle of Nourishment to the whole Body, -by The  
Blood which it sends to all its Parts. It Contains' the' natural  
Fire, is the. Seat of the Passions, rhe Point, aS it . were, in  
which all the Sensations, terminate -as in a commofr Centre, and  
the true Seat of the Soul; and all this, tiot-because the Nerves  
draw them Origin from it, as one might beinduced to think by  
what has been said, but because the Heart is the Reservoir, or  
Store-house, of the Blood and Spirits. *Aristotle* even maintains,  
in plain Terms, that the Spirits cannot-be contained in the  
.Nerves. n . : i. - ue :.t-...-si. - . . - τ

But if he ascribed so noble Uses to the Heart, he imagined,  
that the Brain was only a Mass of Earth-and Water, void os  
Blood, and destitute of Sensation. The Office of this cold Mass  
was, says he, to balance and correct the Heat of the Heart:  
But, besides his ascribing this Office - elsewhere to the Lung?,  
he does not specify the Manner in which he imagined the Brain  
could answer this End. Tho’ the Brain be placed immediately  
above the *Medulla Spinalis,* and is joined with in, yet *Aristotle*imagined, that this Marrow was quite a different Substance from  
that of the Brain, being only a Species of Blood prepared for  
the Nourishment of the.Bones, and consequently hot; whereas  
the Brain was, in his Opinion, very cold. Besides, he thought  
the Brain of so little Importance,’ as to place it only next in  
\* Rank to the Excrements; and imagined, that it ought’not to  
-he rank'd among the Parts of tho Body,7 which are united and  
**- Connected with one another, but that it ought to he look'd upon**

aS 4 Substance of a particular Nature, quite different thorn all  
the rest of the Parts.

With regard to the other Viscera, such as the Liver, the  
Spleen, and the Kidneys, he imagined, their chief and princi-  
pal Use was to support the Veins, winch, without them, would  
he loose and pendent, and to fix them in their proper Places.  
Besides this general Use, he assigned some particular one to each  
of them. The Liver, for Instance, assists the Concoction of  
the Aliment in the Stomach and Intestines, by the Heat which  
it communicates to these Parts. The Spleen is not of so great  
Use; it is only, in our Philosopher's Opinion, accidentally neces-.  
Tary to collect, prepare, and give a different Direction to the  
moist Vapours which rise from the Belly; and hence those Ani-  
mass, in winch these Vapours take a different Course, have  
only Very small Spleens. Of this Class are Fowls and Fishes,  
whose Feathers and Scales are nourished by this Humidity; and  
for this Very Reason, says he, these Animals have neither Kid-  
neys nor Bladder. The Kidneys also are, according to him,  
only designed for a Piece of Convenience; fince their Office is  
to imbibe a Part of the Excrement, winch is carried to the  
Bladders of these Animals, in which it abounds too much, that  
, the Bladder may be eased of a Part of its Burden. He adds, **a**little after, that the Humours filtrate themselves, or flow thro\*  
the Substance of the Kidneys; in which, indeed, he has come  
somewhat nearer to the Use generally ascribed to these Parts;  
but he talks at the same time-very obscurely on the Point.

The Testicles are also, according to him. Parts form'd by  
-Nature for Convenience ; but are not absolutely necessary. He  
also affirmed, that two Veins came from the Aorta, and were  
inserted into the Testicles; and that two other Veins came  
to them from the Kidneys; and that these latter Veins con-  
tained Blond, but the former none. That there came from  
the Head of each Testicle, or, at least, from someone of its  
Extremities, another larger and more nervous Canal, which,  
bending itself, and lessening by degrees, ascends to the two  
others; and, being wrapt up in a Membrane, terminates at  
the Root of the Penis. He adds, that this last Canal  
contains no Blood, but a white Liquor; and that termi-  
nating at the Penis, or towards the Neck of the Bladder,  
It there finds an Opening, which leads to the Penis; about '  
which Opening there is a kind of Hulk *oeov* Κέλυφος, or  
Bark. . -

Taking this for granted, he maintained, that when **the**Testicles were cut . from any Animal, all the above-mention'd  
Canals shrivel'd up; and that it was for this Reason, that  
castrated Animals could not, for the future, propagate their  
Species. For a Proof of this, he adduces an Instance of **a**Cow, which conceived aster Copulation with a Bull imme-  
diately after his Castration, and before the Seminal Veffeis had  
shrivel’d up. In another Passage he explains himself still more .  
particularly, with -regard to the Use of the Testicles, when  
he maintains, that they are no Part of the Canass or Reser-  
voirs of the Seed, and that they have nothing: in common  
with them ; but that they only serve as a Counter-poise to draw  
them downwards, and to retard the Motion of . the Seed,  
almost in1 the-same manner with -those Stones which Weavers  
tie.to theinWebs. He advanced farther,, as a Proof of tbeIJse-  
Ieffness of the Testicles, with regard to Generation, the  
Instances of Fishes, and Serpents, which being, to all Appear-  
ance, deprived of these Parts, did nevertheless propagate these  
Species. - ' 'si - ."so . . ς S - ξ r- .- .

He alsio thought, that Conception was occasioned by **a**Mixture of the Male Seed with the.Menstrual Blood; -in. the  
"Matrix; and ascribed no other Part In Generation - to - the  
.’-Female Seed, which, according to him, .was only .the Ex-  
-crement- -of-the- Matrix, which Tome Females 'discharged,  
and some not .; and that these last were not, .on that Ao-  
count, less fit for Generation, orimore deprived of the Senia-  
thonof Venereal Enjoyments, since.it proceeded fromthe Afflux  
of .Spirits to. the Parts of Generations . st.:. ...

*\* As to* the Place where the Concoction of The Adiments was  
.perform'd, andthe Manner in which IrwaS brought about, he  
finagined, thatHhe AlimentS were first prepared in the Mouth  
of such Animals as used any kind of.Food, whichstood in need  
of Mashcation. .Rut wemustnot imagine, that, irrthar Place,  
any sort of Concoction iS madethe hoed is only reduced into  
small Parts, that it may the more- easily he prepared find pehe-  
-trated, after it has descended into theshomach, ’and-lowerPel-  
ly, which are both designed for the Preparation of the -Alinjents;  
and aS theMouthin the Opening at 'winch the unprepared-Ali-  
aments enter, and the (Esophagus theDuct by which It is con-  
wey’d-to the'Stomach, there must, mince manner, be. other  
Openings, by means of which, all the Parts Of the.Body Tee.  
helve the Degrees of Nourishment of winch they stand in need:  
These last Openings are the Mesenteric Veins, which draw what  
in necessary for them from the Stomach and Intestines, in **the**‘ same manner as Horses draw Hay front a Rack.

*- : Aristotle* imagined also, that aSPlanrs received .their Nourish-  
ment frornineir Roots, which were, spread in the Earth; fo

**Ain** inais received theirs by the Mesenteric Veins, which may  
he compared to so many Roots; designed for drawing the Juice  
from the Stomach and Intestines; these last Parts heing, with  
regard to Animals, what the Earth is in respect of Plants. **I**must also observe, with regard to the Anatomy of *Aristotle,*that he himself never dissected any thing but Beasts, and that  
in his Days they had not ventured on the Diflection of human  
Subjects. This he himself seems to insinuate; when he fays,  
*T.hat the internal Parts of Marts Body are unknown, or that v)e  
have nothing certain relating to them ; but that we must fudge of  
'them by the Eaesemblance they bear to those of other Animals which  
correspond to them. - - -*

By these Sketches of the Anatomy of *Aristotle,* we may form  
in Judgment of his Knowledge in this Science, and conclude,  
'that he knew Very little, or nothing, of the true Uses of the  
Parts. . It must, however, he remarked, that he mentions the  
Intestine *feyunum.*; and distinguishes the *Colon, Caecum,* and  
*Rectum*; whereas *Hippocrates* only takes Notice -of the *Colon*and *Rectum.* . v . .... S..

*Le Clare* gives some more Particulars relating to the Anato-  
my of *Aristotle,* which may be consulted by the Curious; but  
it will give no great Information to Anatomists. - ου-

*Dioclet Carystius* is said to have lived some little Time after  
*Aristotle,* that .is, under the Reign of *Antigonus. . Galen* informs  
us, that he was the first who wrote upon the Method of dis-  
secting Bodies; this Art, hefore his Days, heing confin'd to pri-  
vate Β amilies, and only taught to the Children and Pupiis of  
those who possess'd the Secret : But the same Author telis us,  
that *Diocles* made no great Advances in Anatomy.. -  
. But much greater Progresses were made in this Science by  
*Horophilus* and *Erasistratus. Herophilus* is said to have lived  
during the Reign of *Ptolemy Soters,* and to ί have been hern at  
*Carthage,* r . . . ... 2 ..-

*Herophilus* and *Erasistratus* are reported to have had this in  
common, that both of them dissected living Subjects. Of the  
former, *Tertullian* talks in this manner: Herophilus, *that Phy-  
sicians or rathcr Butcher, who dissected six hundred Men, in or.,  
der to find out Nature ; who hated Man, in order to know the  
Construction of his Body, could not, by that means, come to a  
more perfect Knowledge os. his internal Parts, since Death induces  
a great Change on all the Parts, as they are not the fame after  
Death that they wore bofore, especially since they did not die a  
natural Death, (but under all the Agonies to which the Curiosity of  
the Anatomist was pleased to subject iherns*

The Fact may possibly be true ; the Possibility of it is not to  
be disputed, fince, in these Days, we meet with Instances of the  
like Inhumanity. But may we not suspect, that fince *Hiro-  
ophilus* and *Erasistratus were* the first who dissected human Bo-  
dies, the Novelty os the Attempt forcibly struck the.Minds of  
the Vulgar, and laid a Foundation for groundless Exaggerations,  
aqd a Publication of more than was really Truth ? a thing Very  
common upon Occasions of a like Nature; witness the Story of  
*Medea,* who was branded with the Inhumanity of boiling Men  
alive, for no other Reason but because she invented warm Baths:  
And who, to this Very Day, can persuade the Vulgar, but the  
Pupiis of Anatomical Schools secretiy convey off People, in Or.,  
der to dissect them ?

. 'Tis, however, certain, that *Herophilus* and *Erasistratus* had  
really dissected many human Bodies. This last speaks, in a Frag-  
ment of his Anatomical Works, of the Brain of **a** Man whom  
he had dissected ; and of *Herophilus, Galen* talks in this man-  
ner *(de Dissect. Vulva, Cap.* 5.) : *He was,* says .he, *an accorne.  
plijhed Man in all the Branches of Physic; but he was particu-  
larly knowing in Anatomy, which he had seamed not, by the Disc  
section of Beasts alone, as Physicians usually do,.nut princi-  
pally by the Dissection of Men. . .*

: The same *Galen* observes, *(Administrat. Anatomic. Lib. Ji  
Cap.* 5.) that it was at *Alexandria,* the Capital of *Egypt,* where  
*Herophilus* made his Dissections; which renders it probable,  
that it was Owing to the Curiosity of the Kings, and their Incli-  
nation to encourage the Artsy that these two Physicians had the  
Liberty granted them of instructing themselves by dissecting  
human Bodies: A Liberty which those of succeeding Times  
very rarely enjoy'd for many Ages, whether thro' a Defect of  
Kings of. equal Courage and Learning with the first *Ptolemies,*or thro' the scrupulous Disposition of the People passing to the  
Sovereigns, or getting the better of their Authority. I am not  
ignorant, that *Riolanus* has maintained, in Opposition to this,  
that they not only dissected Men before this Time, but that this  
Practice was eVen continued down to the Very Days of *Galen.*He also maintained, that *Aristotle* practised the same kind of  
Dissection ; but this learned Anatomist proves no more, than  
that *Aristotle* really dissected Animals, and composed some Books  
of Anatomy, to which he often refers his Readers. Tins can-  
not be denied ; but that he diisected Men, cannot be proved,  
since we find *Aristotle* himself confessing, thar hemeVer dissected  
any thing but Beastin

This.Anatomist succeeds no better, when he attempts to  
prove, that *Hippocrates* had dissected human Bodies; but his  
Arguments for this will, noon an imoartial Review, he found

so weak and inconclusive, that we may safely infer, that  
*Horophilus* and *Erasistratus* were the first who were known to  
dissect human Bodies. .

. As for *Herophilus,* one os the principal Projoss os his Accu-  
racy is this, that he addicted himself to those.Parts of Anatomy  
winch had not hefore been touched upon. Neurology, or the  
Dissection of the Nerves, was in his Days a Part os Anatomy,  
not as yet well known. *Galen* informs us; that *Herophilus* was  
the first aster *Hippocrates,* who handled this Matter.with Ac-  
curacy ; but he shares, the Praise, due to him in this respect,  
with'another Physician, *Eudemus:* As for *Hippocrates,* who  
likewise comes into theAccount upon this Occasion, *Galen,* being  
resolved to extol him above all tho antient Physicians; honours  
him with a Degree of Knowledge in this, respect, which his  
Writings no-where discover; . : .

. It is Very probable, that *Heropihilati* was the first who was  
known to discover the Nerves; properly fo called, and who  
knew how to demonstrate them; According to *Rufus. Ephe-  
sites,.* he divided the Nerves into three Kinds. The first he  
called Ἀισθητικὰ .καὶ πρααιρ-τικὰ νεορα, *ar those Nerves which are  
the immediate Instruments of Senfation, and the Memistors of the  
Will.* These, according to him, *derived their Origin from the  
Brain,, from which they rose .like so many Branches, and lucre a  
Part of the Medulla Spinalis. The second proceeded from some,  
of the Bones, and terminated at others ofAhctn. The third  
arose from some of the Museles, and terminated at others.* By  
this we see, that *Herophilus* gave the Name of *Nerves* to those  
Parts, which were afterwards called *Ligaments* and *Tendons ,*but 'tis a Matter of .little Moment, what Names Things re-  
ceive, provided they be sufficiently distinguished; In Reality,  
this Distinction of three Sorts of Nerves, ascribed to this antient  
Anatomist, is a .Proof, that no such Distinction was made be-  
fore his Time, and that these .Parts were confounded with  
one another. The Writings of *Herophilus* being lost, we know  
no more of his Sentiments, with regard to the true Nerves,  
but that he gave the Name of *Optic Pores* to those Nerves  
which reach to the Bottom of the Eye, and which now are  
called *Optic Nerves* ; and maintain'd, that they had a sensible  
Cavity, which was not to be met with in other Nerves. .

- There is nothing remarkable\* with respect to his Notions OT  
the Uses of the Brain, except that we are told, he imagined  
the reasonable Soul was lodged in its Ventricles. .

But one of his principal Discoveries,\* which; though look'd  
upon to be the Product of our own Age, is nevertheless Very  
antient; is, his finding certain Veins in the Mesentery, which  
according to him, .were destin'd to nourish the Intestines,  
which do not, like the other Veins, go to the Vena Portae, but  
terminate in certain glandular Bodies. *Erasistratus* likewise  
discovered something os this Nature. " \_ .  
. Besides, as *Herophilus sad* learned Anatomy, not by reading  
the Books of his Predecessors only, and form'd particular Ideas  
of the Parts, from what he had seen in Dissections, especially  
those of human Bodies, he expressed these Ideas by Words;  
which appeared to him most proper for that Purpose ; that is,  
he invented new Names; and gave Names to Parts, which be-  
fore had none. . .. , - . , , .

For Instance, he called the first of the Intestines, Or that  
which is next to the Stomach, Δωδεκαδάκτυλον, because It is  
twelve Inches in Length; . ; , ..

. Having also observed, that the .Vestel which passes from the  
right Ventricle of the Heart to the Lungs, and which the took  
for a Vein, had a thick Coat like that of an Artery, he called  
it; if we may belive *Rufus Ephesius, tffizArierial Vein*;. and for-  
the quite contrary Reason, he called the Vessel winch comes  
from the Lungs to the Lest .Ventricle of the Heart, the  
*Vinous Artcry.* But though the Names he gave to those  
Vessels, point out the Knowledge he had of the Heart, and the  
Veffeis with which it is immediately connected, yet *Galen (De  
Hippocrat. et Platon. Decret. Lib.* I. *Cap .10'.)* observes, that he  
has been Very negligent in describing the Membranes of the  
Heart, to which he had nevertheless given a Name, calling  
them *Nervous Separations, ut Partitions.*

. It was also *Hcraphilus* who first calied two Coats of the Eye,  
the *Tunica Retina,* and the *Tunica Arachnoides.* He also called  
that Membrane which fines the Ventricles of the Brain, the  
*Membrana Choroides,* because he saw, that it resembled the  
Chorion which covers the Foeths in the Matrix.

He also compared the Cavity, which forms the fourth Ven-  
tricle of the Brain, 'Αναγλυφὴ τοῦ καλάμου, to .the Concavity  
Of a writing Pen, or Reed, used for that Purpose in *Egypt.*He has in like manner given the Name of Ληνὸς, *Torcular,* to  
that Place where all the Sinuses of the Dura Mater unite.

.. It was he likewise who gave the Name of *Glandula Pa-  
rastata* to those Glands which he about the Root of the Penis.

. He styl'd these *Parastata gstandulous,* in order to distinguish  
them from other Parastatae, winch he called *searicose,* and  
which he placed at the Extremity of those Vessels which con-  
Vey the Seed from the Testicles, or rather, aS he thought, which  
serve to prepare it; for though he did not deny, that the Testi-  
Cles served, in some measure, to the Generation of Seed, yer

he helieved, that the above-mentioned Vessels contributed much  
more to that Purpose. .The Word *Parastata* imports any  
thing situated near another. Some antient Physicians have also  
given the Name of *Parastata fo* the Epididymis. It is plain,  
that *Hippocrates* and *Acfstotde* knew the Varicose Parastatae of  
*Horaphilus,* though they did not give them the same Name.

. The Authority of *Iieraphilus,* in point of Anatomy, was **so**?'eas, that almost all the Names he assign'd to the different  
arts, are still preserved. The Testimony of Antiquity is **so**strong in the Favour of *Horaphilus,* that we cannot, without  
injuring his Character, deny inm to .he the best Anatomist of  
the Times in winch he lived. If his Writings had reached Our  
Hands, we might have, been able to heve judged of his Senti-  
meats *for ourselves.* Bur-aS they are lost, we can say no more,  
than that what is preserved in Quotations is sufficient to give  
**us** a great Idea of his Exactness and his Skill, especially .if we  
consider, that he lived at a time when Anatomy was only in  
its Infancy, and that his whole Stock of Knowledge, in this  
Particular, was principally ofhis own acquiring. *Fallopius,* **a**knowing Anatomist of the last Age, was so superstitious an Ad-  
mirer of *Herophilus,* that he laid it down as a Maxim, that it  
was aS unreasonable to contradict him in point of Anatomy,: as  
to contradict the Gospel; bur the Encomium is a littie too ex-  
travagant. . . - - \* ’ . .

. It is generally thought, that *Erasistratus* was contemporary  
with *Horaphilus,* or liv'd Very soon aster him. ,

' It was by means of Anatomy, .that this Physician first became  
considerable in the World; and *Galen,* who upon many Occa-  
sions talks unfavourably enough of him, yet confesses *that*Erasistratus *had contributed a great deal to the Re-ostablisinnent  
of Anatomy, which,,* as hesays, *had been in a great measure last  
for forne time before.* But 'tis no eafy Matter, to find . out  
what particular Period of Time he has in View: However,  
that we may understand the Passage the better, it is .necessary  
to relate the Whose of it. *Those,* says he, *who are not asuamld  
trfpeah against Evidence, are the Cause of the Length of this  
Dispute* {the Dispute betwixt him and *Chrysippus* the Stoic, who  
maintain'd, that the Seat .of the Sold, and the Origin of the  
Nerves, was in the Heart]. *We ought not to accuse either ilspquicr*Crates, or E udemus, or Herophilus, or Marinus, *who since Abe  
Days of the. Antients have re-establisoed the Science of Anatomy,  
which had been neglected er* τῳ μεταξύ *in the intermediate*

*Space of Time between them.*

*Galen* at first seems to hintat the Time which pasted between  
*Efculapius,* or his first Descendants, and *Hippocrates,* which is  
that dark Period, during which, the State of Physic was not  
known. But we shall see by what he says elsewhere, that he  
meant no such thing, in order then to prevent the Contra-  
diction betwixt the Passage now quoted, and some others of the  
same Author, we must necessarily put a Point aster the Word  
*Hippocrates,* and begin another Period thus : *lgre aught not ta  
lay the Blame upon* Hippocrates. *Neither ought we to accuse* Era-  
sistratus, *nor* Eudemus, *nor* Herophilus, *nor* Marinus, *who after  
the Antients have ro-establisued the Science of Anatomy, which  
had-been neglected in the Tome intervening .between them.* **Or**this Sentence of *Galen* may be transiated thus: *We ought  
neithcr to accuse* Hippocrates, *dor those who have re-establisued  
Anatomy, which had been neglected in the Interval between, them  
and him, such as* Erasistratus, Eudemus, Herophilus, *etc.* Ac-  
cording to this Explication, which is the genuine Sente of *Galen,  
Hippocrateslumffi* not he rank'd among the Restorers of Anatomy,  
which would not agree with what the same Author says in an-  
other Passage, *\DeAdmiuastr. Anatom. Lib. as. Cap.* I.] " That  
" the antient Physicians, -and even the antient Philosophers,  
" were Very much addicted to the Study of Anatomy, and  
" that in these Days Fathers not Only train'd up. their Children  
" in it, by obliging them to read and write upon the Subjects,

bjit alsoby making them dissect Subjects themselves ; so that  
" having learned the thing from their Infancy, itwasimpoffi-.  
" ble they should forget it. But, Continues he, it was not so  
" afterwards,-when Physic came to he out of the Hands of  
" the *Asclypiadean* Family, and when Physicians began to teach  
" their Art to Strangers, especially to Men advanced in Years,  
" for whom they had an Esteem, and whom they reverenced  
' " on account of their Virtue. These Mete,’not being young  
" enough to -labour at Anatomy .with Success themselves, or  
" to inform themselves of the Parts os the Body by their own  
" Sight, and by putting their Hands to the Work, could only  
" learn Anatomy very imperfectly. Hence it was, that, in.  
" Process of Time, the necessary Instructions in this Branch  
" of Learning passing often from one hand to another. Ana-  
" romy grew still worse and worfe.”

. Thus *Galen* supposes, that Anatomy was in a flourishing State  
whilst Physic was confin'd to the *Asiseypiadean* Family ; he eVen  
fixes, in express Terms, the Beginning of its Declension, at  
the particular Time when Physic began to he practised by others,  
**than** those of that Family. Now we are no-where inform'd,  
that Physio was practised out of this Family, till the Philoso-  
phers began to encroach upon the Art, or, at least, till Hipo  
*pocrates* **began to teach** Disciples, **as** *Galen* **elsewhere observes.**

AS this is the Case, it is scarce to he believ'd, that the Philo-  
sophers were the Cause of the Decay osuAnatorny, since it was  
their interest Io carry it to its Perfection, even though they  
had not had the Interest of Physic in View. *Galen* himself  
does not think, that this was the Case, since he joins the Phi-  
losophers and Physicians together, when he speaks os the Time  
wherein Anatomy was in its Perfectinn; and by the Philoso-  
phers, he undoubtedly meant *Democritus,* and others who pre-  
.ceded *Hippocrates.* So that the Time spoke of, must he that  
'winch followed the Death of *Hippocrates.*

But there is a Considerable Difficulty in this Point ; for if  
*Hippocrates* was so skilful an Anatomist as Gance represents him,  
who can possibly believe, that his Knowledge in this Particular  
should heve been so soon lost, or rased from the Memories of  
Men, that *Dioclet, Praxagoras, 2nd* the. other Physicians os  
their Time, were so little improved by his Discoveries, or the  
Traditions of.them, that *Galen* has with Justice styled them  
*{Hy Dissect. Psalva, Cap.*ἐν.] unskilful Anatomists ? Before  
this could happen, a great Time must have intervened between  
*Hippocrates,* and *these* Physicians. But where shall we find  
all these Successions, or that great Number of Generations,  
since all the Authors agree, that *Diocles* followed snot long  
after *Hippocratis* ; so that he must have. been contemporary  
with *Plato Vi As.* this is the Case, if he *did aot ice Hippocrates*himself, he must, at least, heve seen his Sons, or his Son-in-  
law, who may reasonably be presumed to inherit the Know-  
ledge of their Father, in point of Anatomy, as well as of the  
Other Branches of Physic. And . aS for *Praxagoras,* who lived  
almost in the same Time with *Diocies,* though he had nor had  
an Opportunity of instructing himfelf in the same way, that is,  
by the Traditions of *Hippocrates* and his Disciples, yet, accord.,.  
ingto *Galen* himselsphe was oneOf the Descendants of *Esettla-  
pius,* the Children of whese Family were train'd up to Anatomy  
from their Infancy ;’ so that, in tins respect, *Hippocrates* could  
enjoy no greater Advantages than he. *Galen* would not have  
involved himself in this Difficulty, st he had not heenimrea-  
sonahly prepossess'd in savour of the *Asclypiadean* Family, as  
may he easily seen by ins Works.

It is certain, that *Erasistratus* and *Harophilus* carried Ana-  
tomy to a higher Pitch of Perfection. But *Galen,* who look'd  
upon the former of these as the Rival os *Hippocrates,* was un-  
willing to confess this, but declares all along in savour of the  
latter.. .. .in. ... . .. ... - 1 .

It is also certain, that before *Erasistratus* and *Haraphilus,*Anatomists had never Ventured to dissect human Bodies; and  
thet in the Times of *Aristotle,* who lived not long hefore these  
two Physicians, they had only dissected Beasts. It must be own'd,  
that in *Egypt* they had long before a Custom of embalming these  
dead Bodies, which could not be done without opening them ;  
and *Galen* himself confesses, that this Custom might have fur-  
nished the Physicians of that Country with a favourable Op-  
portunity of instructing themselVes.

. But as it is not probable, that those Persons who were em-  
ploy'd in Embalming, durst satisfy their Curiosity entirely, and  
search as narrowly as was necessary into the human Body,  
which was look'd upon as something sacred. Anatomy could  
not possibly arrive at any considerable Pitch of Perfection;  
whilst no other Means were employ'd in its Cultivation.. Car-  
cases, upon which every thing might he attempted, were ab-r  
folutely necessary for that Purpose. These were probably first  
granted in Consequence *of* the Inclination which the Kings of  
these Timeshad to advance the Arts and Sciences. *Alexandcr  
the Great* first began to patronize those who apply'd them-  
selves to Natural History, by ordering *Aristotle* to labour at that  
**os** Animals, and their several Parts; .and without Doubs, .Pro-  
*lemy Soter,* or *Ptolemy* the Son of *Lagus,* succeeded *Alexandcr,*as well with regard to this Inclination, as with regard to that  
Part Of this Empire, which fell to his Share. This appears still .  
the more probable, if we consider, that *Ptolemy* was a Man  
of Learning, and wrote himself a History of *Alexander,* as we  
learn from *Arrian. Ptolomy Philadelphus,* Son of the precede-  
ing *Ptolemy,* was no less industrious in promoting Arts and  
Sciences ; since he invited to this Capital all the learned Men of  
**his** Time, and collected, at an extraordinary Expence, aLibrary  
of Books from all Parts of the World, in order to form a Li-  
brary, which was still augmented by his Successors. ...

. It is probable, that thefe two Kings, getting over the Scru-  
**ple** which had till then reign'd, of dissecting human Bodies,  
not only granted the Physicians the Bodies of Criminals aster  
their Death, bus, if we may give Credit to some Authors, put  
into their Hands many of these wretched Creatures, to he  
dissected, imagining, that they might by that means discover  
things, winch otherwise they could not do. Herophilus *and*Erasistratus,. says *Celsus, have dissected living Criminals, con\*  
demntd to Death, and dragged scram their Prisons by the Order  
of their Kings, for that very Purpose. „*

Winch ever *os* these two Princes *Erasistratus* lived under,,  
’tis probable, that he said held *os* this favourable Opportunity,  
and made those Discoveries in Anatomy, which gain'd lum so  
high a Reputation. But as. his Writings have not reached us,.

we know no more Of his Sentiments than what are transmitted  
to us by *Galen,* who generally quotes him with no Other View  
hut to refute hint. ,. . 6

The principal of *ErasistratuPs* Discoveries, which, by the  
way, was not made upon human Bedies, hut which at the  
same time acquir'd him abundance of Honour, was his finding  
out *[Galen, an Sangesssit Natura in Arteriis, Cap.* 5. *et Ad..  
rtidistrat. Anatom. Lib. J. Cap. ultimo certain white vessels in  
the Mescntcry of fucking Eids, which he believed to be Arteries.*He added, *That these scessels feenddat first* to *be full ofAir, and  
afterwards of Chyle. ’ : . τι-*

ς *Erasistratus* and *Heropihilus* were the first who knew the true  
and genuine Use Of the Brain and Nerves, or, at least, the  
Uses ascribed to them by all succeeding Anatomists. *Rusm  
Ephesius* says, that *Erafssiratus* owned two Sorts of Nerves,  
. those which are the Instruments of Sensation, and those that  
are the Instruments Of Motion. He maintained, according to  
*Galen,* that-the former were hollow, and drew their Origin  
from the Membranes of the Brain, whereas the other sprung  
from the Brain itself, and the Cerebellum. But *Galen [De  
Hippocrat. etPlaton. Decree. Lib.* 7. *Cop.* 3.] informs us, that  
*Erasistratus,* having inquir'd more accurately into the Matter,  
was at last convinced, that ail the Nerves proceed equally from  
she Braln. This may he gathered from a Passage of thin antient  
Anatomist, related by *Galen,* she Whole os which I shall tranflate,  
that we may see what Notions he entertain'd with respect to  
the Brain, the Cerebellum, the Nerves, and all the several  
Parts connected with each os them. " We examined, says  
*fr Erasistratus,* what the ..Nature os the human Brain; was,  
" and we sound it divided into .two Parts, aS in- is in all other  
Ca Animals, It had a Ventricle or Cavity of a longitudinal  
so Form. *\Hicre there scums* to *be a Chasen, or Defect in the Text]  
These* Ventricles had a Communication with one another,  
" and Terminated in a common Opening, according to the  
Contiguity of their Parts, reaching afterwards to the Cere-  
" helium, where there.was-aim a imail Cavity. ..But each

Pari was separated from the other, and shut up in its pro-  
" per Membranes, and the Cerebellum in particular was wrapt  
" up by itself, as well aS the strain, which by its Various Wind-  
" ings and Turnings, resembled the intestinum JejuInim. The  
" Cerehellum was in like manner folded and. twined different  
" ways, so that it was easy to know by seeing it, that aS in  
" the Legs os swift-running Animals, such as the Hart, the-  
" Hare, and some Others,, we observe Tendons and Muscles  
" well calculated for that/Purpose ; so in Man,, who has a  
" larger Share of Understanding than other Animals, this great  
" Variety and Multiplicity; Of Foldings in the human Brain,  
" was undoubtedly design’d sor some particular End. Be-  
" sides, we observ'd, contiones *Erasistratus,* all the Apophyses  
" Or Productions of the Nerves which come from the Brain ;  
" so that, to .say all at. once, the Brain is Visibly the Principle  
" Of every thing that passes in the Body; for the Sense of  
" Smelling proceeds from the .Nostrils, being pierced in order  
" to have a Communication with the Nerves. The Sense of  
" Hearing is also produced by the like Communication Of  
" Nerves with the Ears. The Tongue and the Eyes receive  
" also the Productions of the Nerves of the Brain.''

Here we see, by the Confession of *Erasistratus.* himself, that  
he had dissected Mem *Erasistratus* had also Very accurately  
.described, in *Galen's* Opinion, [De *Hippocr, et Platon. Decree.  
Tib. I. Cap.* Io. *et fab. si. Cap. fr]* the Membranes which are  
.found at the Orifices of the Heart; and he maintain'd with  
*Aristotle,* that the Meins and Arteries drew their Origin from  
it. *There are,* says he, *certain Membranes inserted in the Ori-  
sices of the Vessels of the Hoart, of which the Heart makes use,  
either for the Reception or the Expulsion of such Substances, as  
either enter into it, or come out of it. Some.,* adds *Galen, have  
been so rase as to deny, that there were such Membranes, and  
Lave loosed upon them as Fictions of* Erasistratus, *or a kind of  
Hypothesis invented do support his own System t* But thefe Mem-  
.branes are so well known by Anatomists, that none hut Novices  
dn the Art are ignorant of them. There are, continues *Galen,*-three of these Membranes at the Orifice of the *Vina Cava,*which resemble the Points of Arrows; whence some of the  
Disciples os *Erasistratus* have called them τριγλῶχινες, *T.ricu-  
-s.pides.* There are\_also at the Orifice of the *Artcria Verios.a* (for  
so I call that Artery, which rising from the left Ventricle, dis-  
perses Itself in the Lungs) Membranes of a like Form, but of  
.different Names ; sor that Orifice has only two Membranes. The  
Other two Orifices, I mean, that *os* ithe Vena Arteriosa, and  
that of the Arteria Magna, have also each of them three Mem-  
branes, resembimg the Sigma os the *Greeks,* which resembled  
-our C. Hero *Galen,* ceasing himself to speak, again intro-  
duces *Erasistratus,* saying, " That these two last Orifices are  
so equally disposed to convey any thing from the Heart; that  
. " thro' the former the Blood stows to the Lungs, and thro'  
..«« the latter the Spirits, inorder to he distributed thro' the whose  
“ Body.. *[Hire some pant of thesaKCk Text seems to be wanting]*/‘ Thus it happens, continues *Erasistratus,* that these Mem-  
" branes alternately perform opposite Offices m the Heart.

*p- Those* which are: adherent to the vessels; hy which Suh-  
" stances are carried into the Heart, hend inwards, that they  
" may yield to the Impetuosity of shch. things, as are carried  
so towards them, and, lying in the very Cavities of the Heart,  
" may open its Entry for the Introduction of such Substances.  
" as are attracted to it ; for we have no Reason to imagine,  
that such Substances, enter the Heart of .their own Accord,  
" as if it were an inanimate Receptacle ; but the Heart, by  
"Its Diastole or Dilatation, draws them to it, as the Black-.  
" smith's Bellows does the Air; find in this manner the Heart  
" is fill'd. ; The Membranes of those Vesseis, on the other  
p. hand, which serve to convey things-from the Heart, are  
quite differently disposed and situated ; so that yielding easily  
" Io the Substances coming from the Heart, they open their  
*f* ‘ Orifices at the time it thrusts out such Substances; whereas  
*“ at* other times they shut up these Orifices, and allow nothing  
" to return which is once, thrust out, just as the Membranes ot  
"the Vessels, which serve to introduce things into the Heart, .  
" shut the Orifices of these Vesseis upon the Heart's con-  
" tracting itself, and allow nothing to be carried out which is  
" once thrown In.'\*

It were to he wish'd, that *Galen* bed lest us inore Fragments  
Of *Erasistratus, os* the fame Nature with these two.. .

Besides, what, he elsewhere fays, *that some thought the Mem.,  
branes of the Heart a Fiction* oy Erasistratus, is a sure Proof,  
that the Book *De Corde,* ascribed to *Hippocrates,* was not really  
wrote by him, smce in it these Membranes are made Mention  
os. - If this Book had heen wrote by the Author whose Name  
it bears, *Galen* would not have sail'd to take Notice of it, for ,  
his Honour, and in order to stop the Mouths of those who.  
thought, that these Membranes were an Invention of *Erasisira-  
ties.* He had nothing to do but to let these People see, that  
*Hippocrates* had wrote before on the same Subject, s

But 'tis surprising, that this same *Erasistratus,* who had so  
accurately examined the Heart, and diflected so many living  
Animals, should yet embrace an Opinion, with regard to the.  
Arteries, which all Other Anatomists heve look’d upon as-ab-  
surd.. He affirm'd, as did *Praxagoras* hefore him, *[Galen, an  
Sanguis sit Natura in Arteries] that in a natural State, the Ar-,  
teres contained no Blood, and that they, as welkas the left Ven-  
tricle of the Heart, were, only silled with Air.* It was an easy  
matter to give him the Testimony of his own Eyes for his  
Error; but he had recourse to this Subterfuge *[Galen, an San-  
guis sit Natura in Arteries, et Platon. Decret. Lib.* I. *Cap. 6.  
.et de Fencesect. adv. Erasistratum, Cap.* 3.] *t As soon,* said he,  
*as the epen the left Vientricle of the Heart, that Air or Spirit it  
evaporated before, sue can observe it, ana the Feniricle is instantly  
silled with Bloddi* He asserted the seine thing with regard to.  
-the Arteries. -S'’...’ ...

. What engaged him to entertain this Opinion, with regard  
to the Arteries, was, aS *Galen* infonns us, *because he could not  
conceive how there should be t wo Finds of Vessels destin'd for the  
Conveyance of the fame Liquor,* that is, why both the Veins and  
Arteries should contain and convey the Blood i If he had known,  
she Secret of the Blood's Circulation, which some learned  
Men imagine is plainly found in the Writings *os Hippocrates, .*he had not been so much puzzled and perplexed with regard  
to this Point ; he might even have inform'd himself of it, by  
.the Knowledge he had of the Membranes or Valves Of the

Heart, if he had not been mistaken with regard.to one Of  
them. What follows, will illustrate this Anatomist's Opinion, -  
and at the same time inform us what his Sentiments were,  
.with regard to the Causes of Diseases. .....

*Galen, de Venasect, advcrs. Erasistratumi* says, that *Erar  
sistratus* maintain'd, " Thet the great Vein was the Reservoir  
. " of the Bleed, and the great Artery that of the Spirits.'' He  
added, ec That after these Reservoirs had divided themselves  
de into many Branches, they became smaller, .and their Num-  
." her greater ; and that as there in no Place in all the Body  
“ where any of these Branches terminate, that has *nof* a  
" smaller Branch which receives what was brought to it by the  
“ larger; so it happens, that hefore these Vesteis arrive at the  
' " Surface os the Body, they divide themfelves into Branches  
*N* so small and minute, that the Blood they contain cannot  
" pass through them; so that, adds our Author, though the  
An Mouths of the Arteries and Veins he Very near each other,  
." yet the Blood keeps, itself within its proper Bounds, without  
\*c entering the Vessels in which the Spirits flow; and in this  
." Cafe, the Animal remains in Its natural State.. But when  
any Violent Cause happens to. disturb this CEcohoiny, the  
" Blood forces itself into the Arteries, and proves the Source  
of Disorders. Among the Causes now mentioned, too great  
a Quantity of Blood -is the principal; for in that Case, the  
" Coats of the Veins are dilated, more than ordinarily, and  
5" their Extremities, which were formerly shut up, are open’d;

whence follows a Transfusion of the Blood from the Veins  
ie into the Arteries. And this Blond-, by its Irruption, oppose-  
ing the Course and Motion of the Spirits, which come from  
." the Heart, if this Opposition is direct and immediate, or if  
κί the Blood stops in a principal Part, this causes a Fever; but

" is the Spirits should happen to drive it hackwards, so that it  
" does not pass the Extremity of the Artery, in chat Case,  
" an Inflammation of the Part is only produced. As to the  
" Inflammation and Fever which happen in Wounds, they  
" are also occasioned by the sudden Evacuation of Spirits,  
" which is the Consequence of the cutting os the Artery, and  
" sorces the Blond continually into the Place of the Spirits,  
" lest there should he a Vacuum."

*Erasistratus* made ufe of this Comparison to support his  
System. *[Galen. Histor. Philosoph. Plutarch. Celsius.] Ac theSea,* says he, *which remains in a Calm, when sue is not rustled  
by Winds, smells in an extraordinary manncr, and overflows h er  
Shores, when the Winds blow hard, fo the Blood, moving in the  
Body, -departs from its ordinary Canals, and enters into the Re-  
servoirs of the Spirits, where it afterwards becomes warm, and  
puts all the Body, as it were, on a Fire.*

These are the Notions which *Erasistratus* entertained with  
regard to the Causes of Diseases in general, which at the same  
time are Very different from those attributed to him by the Au-  
thor of a Treatise ascribed to *Galen,* intituled. *The Introduction,*who allures us, that this Physician did not search for the Couses  
of Diseases in the Humours, or the Spirits, but in the solid  
Parts; whereas *Hippocrates* look'd upon these three Substances  
as the Causes of Health and Diseases. I think, that Author  
only means, that *Erasistratus* did not admit of the different  
Humours mentioned by *Hippocrates,* or, at least, seem'd in  
think them of fo little Importance, as not to ascrihe the Causes  
of Diseases to them. . This is what *Galen* himself confirms;

- .. but he asserts at the same time, that though *Erasistratus* over-  
look'd and neglected the Humours, he was nevertheless ob-  
liged to speak of them on **some** Occasions, as for Instance,  
*, [De atrd Bile]* ; when he says, that *a Palsy proceeds from the*

*Hamour, which nourishes the Nerves, being stopped on account of  
its too great Viscidity. ‘* And when .he talks of the Bile and  
black Urine. . .

With regard to Respiration, *[Galen, de usu Res.pirat. Cap.***-I.]** he maintain'd, that it was only useful to Animais by sill-  
ing their Arteries with Air, which is a Consequence of his  
former Hypothesis ; and he imagin'd, that the thing was done  
in this manner: *When the Thorax, [Galen, de usu Respirat, et  
de Locis Affect.] or the Breast, dilates itfelf, the Lungs are  
alsio dilated, and silled with Air. This Air passes to the very  
‘Extremities of the* Aspera Arteris, *and from them to those of  
the sinooth Artcries of the Lungs, from which the Heart draws it  
when it dilates itself, to carry it afterwards through all the  
Parts os. the Body, by means of the great Artcry.* When it  
was objected to him, that the Heart moved in its ordinary  
manner, when a Person retains his Breath, he answered,  
- That, upon that Occasion, the Heart drew Air from the great  
Artery. To this it was replsid. That the Membranes which  
adhere to the Orifice of this Artery, will not so much as allow  
it to return from it to the Heart. But he thought to extricate  
himself by saying. That though this was the Case in a natural  
State, yet it did not follow, that it must he fo during the Time  
a Person retains his Breath, which is a State of Violence, and  
consequently cannot last Very long. -

*Erasistratus* also entertained a Very singular Opinion, with  
regard to the Manner in which the Aliments were prepared in  
the Stomach. He thought, that the Stomach contracts it-  
felf, that it may the more closely embrace the Food, and  
break its Texture; that Trituration corresponding, according  
.to him, to the Concoction of which *Hippocrates* speaks.  
And with regard to the Chyle, that is, the Juice os the Ali-  
ments extracted in the Stomach, he maintain'd, *[Galen, de  
Dacultat. Natur. Lib.* 2. *Cap.* 9.] that passing from the  
Stomach to the liver, it arrived at a certain Place, where  
the Branches of the Vena Cava, and the Extremities of **the**-Vesseis, which are connected with the Reservoirs of the  
Bile, equally terminate; *so* that the Parts of the Bile insi-’  
nuate themselVes into the Orifices of these two Kinds of  
'Vesseis, according as these Orifices are disposed to receive  
them; thet is, every thing of a bilious Quality in the Chyle,  
passes into the Canals connected .with the Reservoir of  
.the Bile, and the pure Blood pastes into the Branches of the  
-Vena Cava, and, taking another Course, is separated from the  
Bile. *Galen* [De *usu Part. Lib.* 4. *Cap.* I3J makes *Era~  
sistratus* say, that *the Peins are divided in the Liver for the Se-  
paration of the Bile. ’ .*

Besides, we must observe, *[Galen, de Faeult. Natur. Lib. 2.  
Cap.* 9. *et de atra Bile, Cap.* 5.] that neither *Erasistratus,* nor  
his Successors, pretended to account for the Causes of certain  
Effects, Researches of which Kind they thought helonged  
more properly to the Philosophers than to the Physicians. Tho\*  
they believed, for Instance, that the Stomach contracts itself  
for the embracing the Food the more closely, yet they were not  
at the Pains to enter into minute Explications of the particular  
Causes and Manner of this Contraction. , Neither did they  
hesitate to own, that they were uncertain whether the Bile was  
produced in the Body, or if it was before contain’d in the All.  
ment. ' -

Another Proof os the Ingenuity of *Erasistratus TJt* have th  
*Aulus Gellius, [Lib.* I 6. *Cap.* 3.J who informs us, that he  
. frankly own'd, when talking of unsatiable Hunger, or a *Bote.  
limia,* (a Word not to he found in *Hippocrates,* but of which  
all the *Greek* Physicians after him have made use) that *he did  
not know why this Disease happen'd rather during great Cold, than  
in hot Weather,* tho’ he imagin'd, that Hunger,\* imgeneral,  
proceeded from the Stomach and intestines being empty ; and  
that a long and unpainsul Abstinence was owing to the  
Stomach's, heing strongly, contracted and shrivelled up. It was  
for this Reason, added he, that those who fast voluntarily seel  
Hunger towards the Beginning of their Course, but not after  
they have lasted for some time. He brought, in Support of his  
Opinion, the Example of the *Scythians, [Galen, de Natural,  
Facultat. Lib.* I. *Cap. ult.J* who, when they were obliged to  
fast, swaddled themselves up with large Rowlers, with a View  
to contract or streighten their Stomachs. ’

*Erasistratus* own'd, that the Urine was separated in the Kid-  
neys ; but he’ did not acknowledge, with *Hippocrates,* that it  
was done by Attraction ; for he entirely rejected this Sort of  
Attraction, tho' the no-where explains himlelf with regard to  
the Manner in which this Separation is made. Some of his  
first Followers believed, as *Galen* informs us, that the Parts  
above the Kidneys received only pure Blond ; that what is aque-  
ous, or charged with Serosities, tends downwards by its own  
Weight; and that after this Blood is separated from the aque-  
ous and useless Part, it is carried to the Parts above the Reins,  
to nourish them.- ...

r It is also necessary to observe, that *Erasistratus* rectified *Plata*with regard to the Use of the *Arlocia Trachea,* thro' which -  
*Plato* imagined the Drink was carried, in order to water the  
Lungs (see *Aulus Gellius, Plutarch,* and *Macrobius si* This  
Opinion was common to *Plato,* with *Philistioni Hippocrates,*and the most of the Physicians of these Days.

*Lycus* and *Quaeintus* are also mentioned aS two antient Anato-  
mists, but nothing particular is known of their Discoveries.

*Marinus* is also mentioned, as an Author who wrote well Oil  
the Anatomy of the Muscles, after the Time of *Erasistratus.  
Galen* is said to have epitomiz'd his Works.

*Aurelius Cornelius Celsus* is also inn Author of too distinguish'd  
Merit to he pass'd over in Silence. He was hern at *Fame,* and,  
in all Probability, flourish'd under *Tiberius, Caligula, Claudius,*and *Ncro.* Many thingS are found dispersed in his Writings,  
from which we may gather, that he rarely employ'd himself in  
Dissections; but that he had, at. the same time, a Very high  
-Veneration for Anatomy.

» Besides his Books *De re Medica,* he alfo wrote concerning  
che Figure and Situation of all the Bones of the human Body ;  
which, indeed, is the principal Reafon why he should not he .  
overlook’d, upon an Occasion of this Nature.

- His Sentiments, with respect to Anatomy, are specisy'd in  
the Beginning of this Article.

*Caius Plinius Secundas* was, according to some, hern in *No.,  
vocomum*; others will heve him to he a Native of *Virona*; bus,  
however this he, ’tis certain, that he lived under the Emperor  
*Viefpasian,* about the Year 72. His Writings are interspersed  
with many curious Observations, relating both to the Anatomy  
-of Men, and other Animals; but as he was no profess'd Anato-  
mist, and never appears to have been exercised in Dissections,  
he took; and inserted in his Works, Truth and Fiction in-  
discriminately, as he met with them in the Writings of others.

Dr. *Wigan,* as well as all Authors who have mention'd the  
incomparable *Aretetus,* have heen sensible Of the Difficulty Of  
fixing the Time in which he liv'd, but concludes it probable,  
that he wrote after the Beginning of *Nero’s* Reign, and before  
that of *Domitian..* His Taste may he judg'd from this, that he '  
thought a Knowledge of Anatomy so necessary, both for disco-  
vering the true Causes os Diseases, and the proper Methods of  
Cure, that in the Beginning almost os every Chapter he pre-  
anises something concerning the Structure of the Part affected. .  
In this Instance he seems to have pursued the Steps of *Erast.,  
stratus* and *Herophilus,* who were the Chiefs of the Dogmatic  
Sect, and maintain'd, that without a Knowledge of Anatomy  
no one could possibly be a skilful Physician. So that *Aretaus,*the' a concise and compendious Writer, has yet insisted upon  
this Branch of Medicine more copiously, and with more Accu-  
racy, than any of the antient Physicians.

The Heart is, according to him, the Principle of Life  
and Strength, in which the Soul and Nature of Man reside  
-in a particular manner. This was also the Doctrine of *Hippo-,  
orates,* and *Chrysippus* the Stoic. For this Reafon a *Syncope\**aS it is a Disease of the Heart, and consequently must have an  
immediate Influence upon Life, is unfriendly to the - human  
Constitution, and in ‘some measure dissolves and destroys that  
Connection by which the Vital Faculty is maintained. He also  
asserted, that the Heart was a warm Part of the Body, and **the**Principle of Life and Respiration; that it is situated in **the**Middle of the Lungs ; and that the Heart inspires the Lungs  
with a Define of fresh Ain, as it heated the Lungs, but that  
the Heart itself attracts its - -

. The Lungs were, according to him, naturally incapable of  
Pain, because they consisted of a loose sort of Substance resem-  
bling Wool. He also maintain'd, that rough cartilaginous Ar-  
teries, incapable of Pain, were distributed thro' them, and that  
they had no Muscles, but only seine small and (lender Nerves,  
by means of which their Motion was produced. And this, ac-  
cording to him, was the true Reason why in a *Prtipneumony,*which is no more than an Inflammation of the Lungs, the  
Lungs themselves are insensible of Pain; and only a sort of  
Heaviness at the Breast, which is nevertheless free from Pain,  
afflicts the Patient; but that all those Membranes, by which  
the Lungs are connected to the Breast, are endow’d with **a**most exquisite Sensation ; and if they are inflam'd, together  
with the Lungs, the Patient is pain'd aS in the Case of a Pleu-  
risy, accompanied with a Peripneumony. .

. This, according to him, is also the Reafon why in Spitting  
of Blood, where the Blood, being immediately discharg'd from  
the Lungs, creates the most dangerous of all Disorders, the Pa-  
tients never cease to hope, even in the Very last Stages of the  
Disorder,.because the Lungs themselves are insensible of Pain ;  
for under every trifling Degree of Pain, the Patients become  
afraid of Death, and most People are more frighted for the Con-  
sequences, than hurt by the Disease itself; whereas, in the  
most terrible Disorders, when unaccompany'd with Pain, the  
Patient is not rack’d with the Fears of Death ; and indeed this  
Distemper is more fatal than frightful to the Patient.

The Pulsation of the Arteries, according to him, propelled  
the Blood; for winch Reason, if the Arteries, are wounded,  
the Lips of the Wound are with Difficulty brought together,  
and kept in Contact. The *Arteria Crasses,* or the *Accra,*winch runs near the *Vina Cava,* in the same Direction with  
the Spina Dorsi, and by *Aretceus,* after *Praxagoras,* called  
ἀρτερία παχεἴη, suffers Inflammation along with the *Pena  
Cava,* which Inflammation was by the Antients called a Species  
**of** *Causes,* fince in both the same Symptoms appear, and the  
Fever in the one Case tends to a *Syncope,* as well as in the  
other ; for the Liver is the Root of the Veins, and the Heart  
the Source and Origin of the Arteries. It is therefore probable,  
that the superior Parts of these Viscera are affected; for the  
Heart imparts Warmth to the Arteries, and the Liver conveys  
Blood to the Veins. Now fince both these Viscera ate Very  
large, the Inflammations to which they are subject, must of  
course he Very considerable. But this same Artery, in inflam-  
mations of the *Vena Cava,* palpitates near, the Spina Dorsi,  
which appears from the Pulsation in the other Part of the  
Praecordia , for the Artery, lying close by the Vein on its Left  
Side, is drawn into Consent with it, as heing dispersed thro\*  
the whole Body; ....

Those of the Antients, whose Writings have been handed  
down to as, scarce make any mention of this Disorder of this  
Artery arid Vein.’ Bint whoever have handled this Subject,  
have followed the Opinion of *Praxagorde,* who, as-we learn  
from *Rufas Ephesius,* affirm'd, that the Origin of Fevers was  
in that Vein which sends Branches from the Liver to the Kid-  
neys, and which alone he called the κοίλη, CaVa, tho' others  
.also gave the same Name to that winch rises upwards to the  
Heart thro' the Septum Transverfuni; so *Aretarus* likewise calis  
it, and says, that both these are only a Continuation of one  
and the same Vein. ....

The Veins rise from the Liver, as froth their coinnion Root;  
and receive the Blood they contain from it. From the Porta  
of the Liver, hetwikt its Extremities, a large Vein arises;  
which, dividing itself still more and more, is at last dispersed  
thro' the Liver, in Veins so small and minute, as th become  
invisible. The Extremities of thefe Veins are inserted into the  
Mouths of others, which, growing gradually larger, and fewer  
in Numher, at last terminate in the Liver in one great Vein,  
which, dividing itself again into two Branches, reach beyond  
the Liver. One of these Branches, Penetrating the first Lobe of  
the Liver, again emerges in its gibbous Part ; and having after-  
wards perforated the *Septum Transversum,* extends itself within  
the Breast, but adheres to no other Part; and heing suspended  
there, is inserted into the Heart ; this is called the *Vena Cava.*Another, penetrating through the fifth and inferior Lobe of  
the Liver, as far as its gibbous Part, goes out hear the Spine,  
and runs along it to the Coxae. Tins is also *tiaeVinaCaua ; for  
it* receives the same Name, because it is the same Vein arising  
also from the Liver : For if any one has a Mind, he may pass  
**a** Prohe from the upper Part os the Vena Cava, winch reaches  
to the Heart, into that Part of it winch creeps along the Spina;  
and back again from the Spina, thro' the Liver, into the Heart,  
for the Passaged the same.. - . . .. ί -. - ‘ τ

In - this Vein, hesides the above-mentioned Inflammation,  
those Disorders which the *Greeks* called Κἐδματα, arise; in  
**winch** Case the Haemorrhage consequent upon its Rupture,  
soon puts an End to the Lise of the Patient. -

The Blood is convey'd from all. the principal Viscera to **the**hollow Vein at the Cubit; for this Vein, and that which lies  
above it, are Branches of one and the same Vein in the Arm :  
Hence it. is of no greatch-Sutvice-to open the superior Vein

than this 5 for they are entirely ignorant of the Sources of the  
/Veins, who appropriate the shperiorVein to the Stomach and  
Liver. But if there should happen any Effusion of Blood frond  
the Spleen, some Physicians-order the Vein lying betwixt tho  
little Finger and the Ring-finger. *to* he open’d,°because they  
imagine, that it reaches to the Spleen.; but this is also a Branch  
of the inferior Vein of the. Cubit. Why then should any one  
choose to open it so near the Fingers, fince at. the Bending of  
the Elbow it is much larger, and permits the Blood to stow out  
more readily. . . . . ^ .. . . . ..

The Work of Sanguification belongs to the Liver, which is  
the Source of the Veins ; and for that Reason the greatest Part  
of it is no more than a certain Concretion of Blood ;. for aS the  
Aliments have Access to the Liver, and as there is.no other  
way by which the Food is convey'd thro' the whole Body from  
the Stomach and Intestines,' .so the Blood pastes from this  
Bowel to all the Parte of the Body. This was also the-Senti-  
ment of *Erasistratus.* The Portae Jecoris consist of Nerves  
and Membranes, which are indeed small of themselves’, but of  
great importance to the Functions of Lite; and of large Veins;  
for which Reason they are Very subject to small Inflammations.  
Besides, some Philosophers have affirmed, that the Appetites of  
the Soul were lodg'd in this Place.' \

- ' Now the Bile is formed in the Liver,’ and IS secreted by  
means Of a Cystis or Bladder situated there for that Purpose,  
and afterwards is convey'd to the Intestines by certain Ducts ;  
and if they should be obstructed by a Scirrhus, or an Inflamma-  
tion, or if the Contents of this Bladder should overflow, **the**Bile, returns backwards, and is mix'd with the Blued,, which,  
flowing thro' the whole Body, carries likewise the Bile along  
with it : Hence in Jaundices the Skin seems, as it .were, ting'd  
with Bile, and the Excrements are white like Clay, and un-  
ting'd with the Colour of the Bile, because none of that Hu-  
mour flows to them, r Hence also Icteric Patients are costive,  
because then.Bellies are neither moistened nor stimulated by  
the Bile. d. ...... .

The Aliment Of the Spleen is black, and the Spleen itself  
deterges and refines the black Blond. It is a Bowel of a rare  
Contexture,, and of a dissoluble Nature, and for this Reason  
subject to Impostumations and Abscesses.. ... :.

The Stomach presides over Pleasure and .Uneasiness, and be-  
cause it is adjacent to the Heart, the common Source of all **the**Faculties, (for it is connected to the Middle of the Heart **and**Lungs, and with them adheres to the Spina Dorsi) it contri.-  
butes very much to Strength, and to Composure or. Dejection  
o/ Mind, upon account of its Consent with the. Soul. This is  
the principal Faculty of the Stomach. - From Pleasure arises **a**good Digestion, a full and fleshy Habit of Body, and a fresh  
and lively Colour. From Uneasiness the Contraries os these  
arise, and sometimes Dejection *of* Mind, when the Stomach is  
empty. The Disorders of the Stomach are, properly speaking.  
Nauseas, Vomitings, Loathings of Food, Hiccups, Eructa-  
tions, and these too sometimes acid ; and tho' in People labour-  
ing under Disorders of the Stomach, it is generally free from  
Thirst, yet in it the Source and Origin of Thirst is contained.

The Colon also contributes to the Concoction of the Fond,  
as well as the Stomach, and the Aliments are convey'd from it  
to the Liver: Neither do all the Aliments pass thro' Visible Ca-  
nals, for Nature distributes the sar greater Part of them thro’  
.the whole Body by Vapours, which easily pass from one Part  
of the Body to another ; and these Very Vapours are also by  
Nature carried thro' the compact and solid Parts of the Body.  
The Colon is a Very large Intestine, wide enough in all its  
Parts, and form'd into Sinuses, more thick and fleshy than the  
small Intestines, and inore capable of bearing Injuries; and for  
this Reason, when this Intestine is the Seat of Colic Pains; the  
Danger is the less: For when the small Intestines are affected,  
a sharp and pungent Pain is felt; but when the Colon is  
affected, there is great Abundance of Humours, and a Sensation  
of Gravity is perceiv'd in it. By reason os its Situation and  
Connection, the Pain sometimes reaches to the Ribs, and  
makes a Pleurisy suspected ; for even in the Colic a Fever some-  
times arises. Sometimes the Pain appears to be on one Side,  
sometimes on the other, under the spurious Ribs; so that the  
Liver, or.Spleen, seems to be affected, and the Pain falls down  
again to the Ilia. With some this Pain seizes the Os Sacrum,  
the Thighs, and the Cremaster Muscles of the Testicles; so  
that *Aretceus,* knowing the Reasons of these Symptoms, justly  
stigmatized the Ignorance of some Physicians, whe, in this  
Case, cut off the Cremaster Muscles, aS if they had contained  
the immediate Cause of the Disease. Now can any thing ad-  
Vanced by later Anatomists possibly come nearer the Truth ?

There are two Coats of the Intestines; as well as of the Sto-  
mach, one of which lies obliquely upon the other. When  
therefore .the Connection of these is dissolved, as it sometimes  
happens in Dysenteries, the interior Coat, separating length-  
ways, is discharg'd by Stool, and strikes many, whe are unac-  
quainted with the true Cause, with a Dread of having lost their  
Intestine 3 and the exterior Coat remaining within, incarns and  
- cicatrizes, and then the Patient hecomes sound ; hut the lower

Intestine is only subject to this Accident, as having its Coats  
Of a fleshy Nature.

.. The Kidneys are naturally glandular Bodies, of a reddish  
.Colour, resembling rather the Liver, than the Breasts and Testi-  
cles. These are Glands, but they are winter than the Kidneys.  
The Kidneys indeed resemble the Testicles in Figure, but they  
are broader, more crooked, and contain small Sinuses, with  
narrow Necks, for percolating the Urine. From these two  
-small nervous Canals, resembsmg little Pipes, branch Out,  
- winch are called the Ureters, and are inserted in the Sides of  
the Bladder on each Side, and from both Kidneys there is an  
equal Conveyance of the Urine to the Bladder.: Nature has  
formed the Sinuses of the Kidneys oblong, and by that means  
- adapted them to the Diameters of the Ureters, "which are but  
small. .' . ....’. r  
: The Bladder is of a Very inconsiderable Thickness, and natu-  
rally of a nervous Texture ; for which Reason it neither incarns  
nor cicatrizes easily. When it is full'it is distended, and when  
empty it collapses;. .so that in case of an Ulcer, it suffers juft  
as much.as a Joint does in Extentiondinnd Contraction. Now  
all Ulcers upon .Joints-are cur'd with, the greatest Difficulty;  
'Besides, bilious Urine, and an inveterate Ulcer, must necessa-  
rily corrode the Bladder. . ....... ...

. The Anns arid Bladder are' contiguous to each other; ’ and for  
this Reason in inflammations of the Rectum, the Bladder with  
Difficulty discharges iss. Contents ;and in Disorders of the  
Bladder, the Fceces: are not discharg'd, even tho\* the -Belly  
should not happen to he costive.: .7 - : ... .. . χ ..

Certain Membranes are affix'd to the Ilia, which are-hervouV  
Ligaments of. the Uterus, r These Membranes, which are iii-  
sorted in the Bottom off the. Uterus,, hard ;by theLoins, are  
small and slender ; the others. towards its Neck, and which  
adhere.here-and-there to the Ilia,.ariS»\*vetynervous,..and spread  
much aster the mafinerofahe Sails of 'a Ship. ANow ssall'thein  
Membranes are relax'd,:the.LIterus salis oueos-its Place.. Some-  
'. times the interior os the two Membranes which surround the

Uterus appears,' and may he separated froth the other; for only...  
two of t is- Membranes can possibly be divided, one of which .  
. recedes from the other, by reason of the'FIuxion of Humours;

as it happens likewise in Miscarriages and hard Labours, in  
which Case st adheres to the .Chorion ; for If that is forcibly  
extracted, the Coat of the Uterus comes along with it hut if  
the Woman escapes Death, .and if it returns to its proper Situ-  
ation, it.reunites exactly, orelfe hangs.a little out. Sometimes  
the Mouth of the Utenin falis out .Only as sar as its Neck; but it  
is easily restor’d, if Fumigations are used, and the Midwife uses  
proper Endea.Vohts.to .replace it gentiy, and by Degrees.: ; xistio

The Head is the Origin of the.Senses and Nerves, andr^b^f:  
attracts the Blood . from the Heart, .'than, conveys it to other-i  
Members. When theresore the Cause TOfiCany Disorder Ἄ  
lodg'd in the Nerves, the Senses must he tnjujted. ' Tho' the  
Nerves.arise from all Parts of the Head, .yet.rheanterior Part  
of the Head is the Store-house, as it were, os. ail the Senses,  
and from it all Aids and Injuries are deriv'd. For this'Reason,  
in applying Fomentations, we ought to proceed no farther than  
the Vertex.

*.. Aretaus,* following the Opinion of *Erasistratus,* maintain'd:,  
that the Nerves were not only the Origin os Sensation, but the  
'Source of all Action and Motion of the Members. i So that if  
the Origin of any Nerve below the Head is affected, asthe Mem-  
brane or Meninx of the.MeduHa Spinalis, theParts which come  
under the same Denomination, and also those which are contigu-  
ous, hecome paralytic; the Parts of the RightrSide, if the Nerves  
cn that Side he hurt ; and those of the Left, if the Nerves on that  
Side should happen to heiinjured. But if the. Cause, ofthe Dis-  
ease he lodg'd in the Head,; if the Nerves on the Right Side he  
affected, the Parts on i the .Left Side will he iparalytic, and'iuod  
*- versu,* . The Reason of - this Phaenomenon is, that the Nerves  
change Sides near their Origin ; for those on the Right Side do  
not go directly all rhe.waytto the Parts on the Right Side; but  
both those on the Right and Left Sides, heing inserted in their  
croper Origins, they , immediately cross one another in the  
Form, of the *Greek* Letter :X,i tsendingto opposite Parts. But  
whether , the whale Body, .or some. .of. its Members, either  
on one or both Sides, are paralytic, site Nerves which arise  
from the Head are sometimes affected/and in. short, are easily  
^deprived of . then, sensitive Faculty, blit do not of themselves

so readily become incapable of Motion. These Nerves also,  
if by .Consent.they contract any- Injury from those destin'd  
for the Purposes of Motion, lose in tome measure their Capa-  
city for Motion, with some Degree of which, tho'a Very smaM  
one, they are naturally endow'd. Sometimes also the Nerves  
arising from fome Muscles, and terminating in others, are hurt ;  
and these are the Nerves which are chiefly capable of Motion,  
and convey it to the Nerves of the Head, which derive a great  
deal of their Motion from them, tho’ they have some. Degree  
of it in themselves. These Nerves therefore suffer principally a  
Decrease of Motion, but they rarely or never lose their sensi-  
tive Faculties ; and is at any time a Congeries of Nerves rising  
from any Bone, and terminating in another, should he either

‘relayed, 6r broke, the Parts hecome impotent and Contracted,  
but they are not depriv'd of Sensation. - - ι .παρ

. According to *Aretaus,* a *Tetanus* is a Disease incident to  
**the** Nerves, in which he also taught, that **the** principal Cause  
of Melancholy resided ; he likewise thought, that they were  
affected, and often contracted, in a Phrenitis ; and that in the  
Gout all the System of Nerves was affected.

- These were the Notions maintain'd by *Areteeus,* with regard  
to Anatomy, which he made chiefly subservient to Physic, in  
accounting for the Symptoms and Causes of Diseases. In this  
he imitated the Sect of the Dogmatists, who maintained, *Thac  
since Pains ana Disorders of various Kinds wcre.incident to the  
internal Parts, no one could apply Remedies to. them who was  
ignorant of these Structure.* So that tho' the Notions of *Aretaus*concurrur sometimes with those of. *Hippocrates, Erasistratus,*or *Hirophilus*; yet he was not the blind Votary Of any Party,  
or the too fond Admirer of any Man ; but freely declares what  
he himself thought Truth; - *Wigan\*s Preface to Aretaus.*

***a \*- .εἴ\*-* ' Y ‘ ~ . . .**

**. si " RUyUS EPHESIUS .**

' TS the next Anatomical Author os Note we meet witin  
*m* -liv'd under the Emperors *Ncrva* and *Traian,,* and is  
esteem’d a Very Ikilful Physician by *Galen,* who also in-  
forms'υέ, that, her wrote in Verse upon the *Materia Medica.*He also herroteCaTTreatise nponsthe *atiea Bills,* or black Bile;  
and shine othutT.[ecesXquotedshv itioi/ar,' but-these have not  
Sach'd ouPHands'; Tor the only'Remains'we have of this Au- '  
orime,\a jinkll Treatise;, ori.' the Gfedur Names of she several

Parte of the hhthart Dody, another.on the Diseases of the Kid-  
.sieys and' Bladder,, and aTragsqsest relating to purgative Medi-  
cines, Thesprinoipai TJesign of .spij Physician, in tho first of  
those WorIessswaS to^gtve.'a-'gefefiil Idea os Anatomy, and to  
dissuade those who studjed Physic in his ownDayS from being  
deceiv'd in reading the\* antient Authors, some of whom had  
describ'd the Parisios the human Body Under one Set of Names,  
and others of them the same Parts under quite different Appel-  
lations. Besides; we may fairly gather from what *Rufus* ad-  
Vances in this Treatise, that in his Days all the Anatomical  
Demonstrations “were made upon Beasts. *Make Choice,* says  
he, *of in Anirnal'"as nearly resembling Man as you canpossible  
meet with, Tou will not.find all the Parts of the Animal exactly,  
and in every Particular, like those of Man; huts tbcre will at  
least be feme Analogy or Similitude betwixt them. Formerly,*continues he, *' Anatomywas taught on human Bodies.*

*\* siNes* also learn from the same' Book, that those Nerves,  
which were afterwards distinguished by the Epithet *recurrent,*were but just then discover'd. *The Antients,* says *Rufus, call'd  
The Artcries of the Necli* carotid *or ‘* carotic *Arteries, which Epi-  
Ahet, in their Language, implynd Sleep-inducing, because they  
imagined, that when these Arteries wore strongly compressed,  
the Animal was inclined to Sleep, and lost the Use of its Voice t  
But in this Age wc have discover'd, that. these Symptoms are not  
occasioned by the Compression of these Art cries, but by that of the  
Nerves, which are contiguous to them.*

.. 'Tis also probable, that *Rufus* observed certain Vefleis of  
ι the Matrix, os which preceding Anatomists had made no men-  
tion. *Herophilus,* says he, *did not believe, that Women had any  
Parastata raricos.a; but upon examining the Matrix of a Beast,  
P hdue observed certain Vessels which arise from the Tesiiclce,  
and which, being, folded back apon both Sides in the Form of  
Varices, terminate in the Cavity of the Matrix. Upon com-,  
profsing these Vessels, there even status from them a glutinous  
Humour ; and 'tis thought that they are certainly seminal Vessels  
of the varicose Kind. Rufus* had before observed, that *in Men  
there vtere sioarr spermatic Vessels, two of the varicose, and two  
.sef’tste glandalastsekiasi;. and that the Extremities of the farmer,  
. vqsiiohAddosiep wstMTfrfales, wore call'd* **PARASTATAE.**

What KeTalls\* in rhIS Passage *Parastatae Farti of as,* appear to  
hethe ..same 'things,‘which’ are. now called *Tobae Pallopiance,*from Pasi^impatheisepposed Discoverer. " ' i ‘ "

**’ s»...'» .... . . .r ..' . ’ ’ -**

***r .s 'r* T.'i τ. r Yss^eGALEN.'. . :**

. Is the next and principal Anatomist of Antiquity ; to him **we**are obliged sor.thostAve know ninth respect to the Anatomy of  
rhe Antients. Asin complete Extract of his Works, on thin  
Subject would he toovnhsutinous, I-shall in tins Place only give  
some general Remarks inn her Anatomy, reserving his particular  
Difcoveries for the Articles to which they properly helong.

*; Galen* maintain'd, that the *Aselypiadae,.* or Descendants of  
*Eseulapius,* down, to the very. Days of *Hippocrates, yatiu* was  
one of that Race, w ere'-perfect Masters of Anatomy; but that  
none of that Family,, except the last, had wrote any thing upon  
that Subject. The Reason of thein not writing was, that their  
Children, to whom alone they communicated their Art, learn'd  
Anatomy immediately under-themselves, almost.as soon as they  
learn'd .the Letters of the Alphahet, and that, by seeing Dis.  
sections made, and making them themselves ; so that they had  
no Occasion for Books to instruct them in this Art. It after-  
wards happened, says *Galen,* that *Hippocrates* having wrote on  
Anatomy, as well as the other Branches os Physic, and having  
first, made Strangers his Disciples, Anatomy began to decline

*caver them s' Bati fap. the Empirics, they are not by that meads  
better understood or comprehended by us, hecause ‘‘tispolscble, that  
fo seen as they are discovered, and exposed to View, they, may  
affiant a different Nature, than what they had before.* The  
fame *Riolanus,* having proved, in general, that the annent  
'Physicians sometimes, differed Men, endeavours to shew in a  
particular manner, that *Hippocrates, Aristotle,* and *Galen,* did  
so too. As for the two first, they come not under our Cordi-  
deration at present. I shall therefore only inquire a little into  
the Truth of his Pretences, with regard to *Galen,* in whole  
favour he stands up against some Moderns, who have main-  
tain’d the contrary r *Peapie,* fays be, *have no Reason to accuse*Galen *of never having dissected human Subjects, and of having  
taught the Andtojny of an Ape instead of that of a Man. I  
could eastly prime by a great many Quotations, from this Author,  
that he has dissected both Apes and Men,; but that he has only  
taught the Anatomy of Moan..* Upon this Occasion, he quotes  
two or three Passages from *Galen,* by which indeed it appears, that  
.this Author treats, or, at least, says he treats, of the Anatomy  
of Man; and in one Passage, he even promises to publish, sepa-r  
rately the Anatomy of some other Animals. .The Words of  
this last-mentioned Passage run thus : *I have net here a Design  
to enumerate the Number of Libes which make up. the Livers of  
ether Animals, because I have net as yet described the particular  
Structure of are) of their Organs, except in seme Passages,  
where I have been obliged to do it, in order to 'illustrate what I  
say conteming Man: But, if Hive, I spall seme time or other  
describe the Structure of the Bodies of. Beasts, and surnise oat  
an exact Anatomy of all their Parts, as I have now done with  
regard to the Pares of Man. Biplanus* quotes another Passage,  
wherein *Galen,* when miking of some Anatomists of his Days,  
says. *That it was. no swonder if they were deceived, strict they  
only dissected the Hearts and Tongues of Oxen, never constdering  
at the same time, that these Parts, ore not, in these Animals,  
the fame they are in Men.* One may reasonably fuppofe, thet  
if *Galen* had not himfelf examined those Parts tn Man, he  
would not have been so forward in censuring those who bad not  
done it inore than himselfi ..

After the Passage in which *Galen* commends *Hirophilus* for  
learning Anatomy by dissecting Men, he adds. *That mast other  
Phyficians dissected only Beasts.* This Passage proves, that *Hero-  
philus* was not the only Anatomist who distedted Men i if none,  
except he, had done so, our Author instead of these Words,  
*Mast ether Phystcians,* should have said. *All ether Phystcians.*Now, if some of the Physicians of his Time dissected human  
Bodies, iris very probable, considering the Fondness he disco-  
vers for Anatomy, that he was not idle in this respeS, whilst  
others were labouring to improve themielvesi I believe then,  
as well as *Rislanus,* thet *Galen* may possibly have dissedled  
human Bedies ; hut ’tis probable he did fo very rarely, and per-  
haps chut imperfectly too. What has already been, said upon  
this Head, proves that the thing could not he undertaken with-  
out. a great deal of Difficulty; and in this Sentiment *Galen*himself confirms us, by the Pains he is at in fpeaking of several  
other Methods, in which be thought Anatomy might be leam’d.  
He advises *(Anatom. Administrat. Lila* **6.** *Cap.* **I.)** *to make  
choice of that Species of Apes, which bear the nearest Resemblance  
to Man ; ar, if such,* continues he, *f annet be found, we mast  
dissect those whose Heads resemble that of a Dog, or Satyrs, or  
-Lynxes: If these Animals jbcruldstill be wanting, we mast make  
use of Bears, Elans, Woasels, or Cats, because these Animal's  
have a kind of Fingers resembling those of Men.* He goes on  
thus: *I have never made an Attempt to dissect Ants, Gnats,  
Fleas, or any such minute Insects, but I have often dissected  
lVeosels, scats. Serpents, and several Species esc Birds and Pisces,;  
hy which I have discovered, that the fame Principle of Intelli-  
gence is employed in the Formation of all Animals s every one of  
which has the Structure and Mechanism of its Body adapted in  
she State and Condition or its Nature.* It also appears, thet  
*Calum* sometimes dissecied Hogs and Goats; and he himself  
*(Anatem. Administrat. Lib.* 7. *Cap.* **Io.** *De Usu Pari. Lila***I7;** *Cap. s.)* speaks of on Elephant, the Whole, or at least  
some Parts, of which he had dissedted at *Rame.* It will, no  
doubt, he fnid, that uur Author advised to begin with dissecting  
Beasts, and to finish and perfect out Knowledge of Anatomy by  
dissecting Men. All this is true, hut let us fee in what Strain  
. he talks of this last Affair *(Anrninifir. Anatom. Libs*^3. *Cap. gisc.*

*I advise you,* says he, *first da .exorcise yourself throughly upon  
Apes Cyhatofyouseaulststnd anOpporeurity of dissecting^ human  
Andy, you may be able readily to discover and know each Pare  
or it, in which'Case you will be foistst in your Attempts, unless,  
before-hand, you havefrequently exercised yourselfupem fther Sube  
sects: For wane of sash a previous Exercise, thasc Wh0 dissected  
the Bodies of the* Germans, *during the Wor undertaken by that  
People agaiast* Marcus Aurelius, *reaped ns other Advnntage from  
their Labours than a Knowledge of the Situation Of the Viscera.  
But a Physasan who hat before try'dbis Hand ppon other Ani-  
mals, andofpriialiy upon Apes, sees us quice the Peculiarities of  
the Parts he dissects. It it more ease for a Mun of Skill and  
Practice in Anatomy, smith a jingle Clar.ce of his dure, is disco..*

apace, because the Physicians who came after him, satisfied  
themselves with reading his Books, without taking the Pains  
to dissedi themselves. *Dioclet,* who came almost immediately  
after *Hippocrates, uftoitc* also on the same Subjects but in such  
a manner as discovered abundance of Ignorance. \_ ...

.. Things remained in this Situation till the Death of *Dioclet,*which happened much about the Time, in which *Herophilus*herd *Eraststratus* appear’d. These two Physicians apply’d them-  
selves iridusttiousty to Dissections; and had, for thet Purpofe, as  
many human Subjects as they desir’d; so thet they foon re-  
iestablished Anatomy, which had been negiedted during the above-  
mentioned Interval. But, the Anatomists of succeeding Ages  
had not the fame Opportunities of differing human Bodies;  
the Reafons for which are at Length enumerated by *Riolanus.*Most human Bedies, says he, were burned immediately after  
Death. There was a Law erracied at *Rome,* in Consequence  
of the Disorders which reign’d during the Civil War, which  
happened under *Marius* and *Sylla,* which discharged and pro-  
hibited the committing any Outrages on the Bodies of the  
Dead. We allo know, that in the Days of Antiquity, People  
were not only afraid of touching, but even of coming near,  
human Carcases ; and for that Reason the *Vespillones,* or those  
who interred the Dead, and even the *Csriurii,* or those who  
prepared the Skins of Beasts, had their Dwellings without the  
Gates of *Rome,* neither had the public Executioners any Re-

, sidence in it; *for* the *Remans* were so delicate in this Point,  
that they would not so much as allow any one to he punished  
within their Walk. The Laws of the *Jews,* relating to these  
who touched dead Bodies, are too well known to stand in need  
of an Enumeration ; but every onedoes not know, that the Sen-  
timents of *she Greeks,* with regard to this Pomi, were the fame  
with those of the *Jews.* This *Riolanus* proves by a Passage  
from .the *Iphigenia* of *Euripides . If any one,* soys that Poet,  
*.stain his Hands by Murder ; if any one touch a Carcase, or a  
Woman immediately after Child-birth ; the Gode discharge him  
from their Altars as impious and profane.* The Difficulty which  
there formerly was, of sinding human Bodies for Dissection,  
appears from a Passage of *Pliny* to the seme Purpofe, *[Lib.* 28,  
*Cap.* 2.] where he fays, *that it was agulnjl the Caws to look  
into the Entrails of Men.* But these Authorities, and all the  
others brought by *Riolanus,* cannot hinder him from thinking,  
that in all Ages Physicians have fallen uponthe Means of pro-  
curing human Bodies for Dissection. This he endeavours to  
prove by a Passage of *Pliny,* where [Liii 29. *Cap.* 5.] he fays,  
*that the Kings of* Egypt *in antient Times opened the Bodies of  
the Dead, in order to know of what Destempers they died.* The  
*Egyptians* also used to embalm them Dead,, which they could  
not possibly do witheut opening them. There were at *Alex-*

*' andria [Galen. Administras. Anatom. Lib. 1. Cap.* 2.] human  
Skeletons, by means of which young Physicians learned to know  
the Bones: We read in *Rufus Ephesius,* that the Physicians  
who lived before him, had learned Anatomy upon human Bodies;  
and the Accounts handed down to us *of Herophilus and Eraj.  
/astratus* will not allow us to doubt of it. *Galen [De Dissect.*

*Vulva, Cap.* 5.] pronounces concerning the first of these Phy-  
sicians, *That he had acquired a very exact Knowledge of Anas*

*. demy, by dissecting listen, and not Beasts, as mast other Phystcians  
used to de. Seneca,* according -to *Riolanus,* affirms, *Medicos,  
vi vim ignoratam Morbi cpgnasceernt. Viscera rescidisses hodie  
Cadaverum Artus refcindi, ut Nervorum Areicuiarumque Pesitio  
'cognosci postit.* That *Phystcians opened the Bowels of Man, in  
order to discover the Causes asc their Diseases ; and that even in  
his Time they dissected the several Parti of Carcases, in order  
es know the Situation of the Joints and Nerves.* But in the  
common Edition of *Seneca,* there areooly these Words; *\Me~  
elici, nt vim igrntam Maria cognoscerent. Viscera hominum resci-  
derunt. Phystcians, that they ndgul know the hidden Natures or  
Diseases, opened the Bowels of Men.* Now *Seneca,* according

*- to FLiolanus,* lived in the Days of *Augustus, Tiberius,* and *Nara ;*and the *Roman* Physicians were allow’d to dissedi the Carcases  
pf their Enemies, which in Reality they did during the Wars of  
*Marcus Aurelius* against the *Germans,* as *Galen* informs he. It  
whs also no difficult Matter to procure the Bodies of such as  
were put to Death at *Rome,* since they remained uninterFd  
without the *Efquiline Gate,* now called the *Parta di S. Lorenoca.*The Bodies of exposed Children might heve also been easily  
obtained. In short, since in these Days Masters had great  
Numbers of Slaves, who could hinder them from using any  
-Liberties with -the Carcases of these poor Creatures, which they  
themielves .should judge proper ? *Riolanus* might have subjoined  
to all these Proofs, what *Cicers* says *[Academic. Quast. Lib.* 4.] :  
*Corpora nestra run nevimus ; qui sent fotus Partium, quam Vsm  
quaeque Pars, habeat, ignoramus e Itaque Medici ipse, quorum in-  
tererat ea nesse, aperuerunt ut viderentur; nec eo tamen, aiunt*

*' Empirici, notiora ofsc illa, quia steri possit, at patefacta .et de-  
tecta mutentur. rye know not,* **fays be,** *aur own Bodies , we  
'are ignorant of the Situation of 'the Pares, and Unacquainted  
with the Powers of each particular Member. For this Reason,  
the Phoficians themselves, whose Interest in was to be through!,  
pursed in these things, dissected human Bodies with a Virus to disc*

*tier what he has elsewhere seen bifere, than for a Novice in the  
'Ant to perceive even the mast evident Things at his greatest Lei-  
sure: Marty of this first Clasi of Men have very quickly disco-  
vered what they wanted to see, upon the Bodies of those who wore  
condemned to Death, ar exposed to the Fury of wild Beasts, or  
apon the Carcases of Robbers, who wore dented the Privilege of  
Burial. Besides, large Wounds, or deep and hollow Ulccrs, have  
sometimes disc covered, to these Men of Skill, many Parts of the  
human Body refembling those they had formerly seen in Apes;  
whereas those who had never endeavoured to improve ihernjelves  
upon these Animals, could reap no Advantage apon Occasions of  
this Nature. Those who have frequently dissected the Bodies of  
exposed Children, well enough know, that the Bodies of Apos and  
Men ucry much resemble each other.* It is not to be doubted,  
but *Galen* employ’d some of these Means, or others of a like  
Nature, in order te instruct himself in Anatomy; and the Ana-  
tomy acquir'd in this Shape, was by him styled, 'Ανατομῆ κατὰ  
περίπτοσιν, or *Anatomy acquired by Accident,* which was the only  
Kind approv'd of by the Empincs. That *Galen* enjoy'd Oppor-  
tunities of this Nature, is plain from another Paliage, where,  
after having advised young Physicians to travel to *Alexandria,* in  
order to see the Skeletons, and not to satisfy themselves with  
what they read in Books upon that Head, he adds these Words:  
*I have often examined the Bones of Men, when Sepulchres or  
ruined Monuments have fallen in my tvay. A Sepulchre, siightly  
built upon the Brink os. a River, happened to be destroy'd by the  
Impetuosity of the Torrent, which had oucrsiaustd it, fo that the  
Body, which had been laid in this Sepulchre, being carried os.fi by  
the Current, sioppidat last in a Place not unlike a Harbour, fur.,  
roundest with pretty high Banks. - I had an Opportunity of seeing  
this Body, of which the Flejh was already rotten; but the Bones  
Werestill connected with one another ; so that one would have sided  
it was a Skeleton, prepared for the Instruction of young Physi-  
cians. One Day 1 also sow the Carcase of a Robbcr lying on a  
Mountain, soar enough from any public Road : This Robbcr was  
kill’d by a Traveller, whom he had attack'd ; and the Inhabitants  
of the adjacent Parts refusing tobury him, because they judged a  
Man so wicked the propcr Prey of Vulturs, his Bones wore two  
Days afterwardsstripp'd of all their Flejh, and dry, like those  
prepared for the Instruction of Physicians. Galen* speaks also, in  
the same Chapter, of a Disease attended with *Carbuncles,* which  
had raged in most of the Cities of *Asia,* and afforded him Op-  
portunities of examining the Situation and Disposition of the  
Muscles of several Parts, which were stripp'd of the Skin, and  
some Part of the Flesh.

If our Author confin'd himself to the Methods above fpeci-  
find, he Cannot sure he said to have made complete and regular  
Dissections of the human Body. Among all the Subjects, from  
which he says Anatomy may be learn'd, none, except the ex-  
pos’d Children, seem calculated for furnishing him with the  
Materiais os a complete Anatomy; because it was no difficult  
Matter to carry off some of these littie Bodies, and afterwards  
dissect them, with the Leisure necessary *for* that Purpose r And  
this, in my Opinion, he himsels seems to insinuate, when he  
says, that *those who frequently dissect exposed Children, well  
enough intnv, that the Body of Man very mush resembles that of  
an Ape.* If Dissections of tins Nature were often made in the  
Days of *Galen,* as we may gather from this Passage, 'tis proba-  
ble that he, like others, employ’d himself in this way; tho\* a  
Principle of Caution might restrain him from making a public  
Declaration of it, on account of the Aversion which then reign'd  
in the Minds of People against Practices of that Nature. It may  
be said, that it was not much more difficult to get some of the  
Bodies of executed Criminals carried off; but he no-where insi-  
nuates, that any one made the least Attempt of this Kind ; for  
when he speaks of what was learn'd by examining the Bedies of  
Robbers, -or other Carcases casually found in the Fields, he in-  
forms us, that this Examination was made upon the Very Spot  
where such Bedies were found, by endeavouring, as soon as  
possible, to discover the Part or Circumstance sought for. This  
may be gather'd from the Passage already quoted, where he says,  
that those who have dissected Apes are able *speedily* to inform  
themselves, by means of the Carcases they find in the Fields,.  
with regard to the Disposition .of those Parts which they may  
have formerly seen by dissecting Animals, in the Course of  
this Passage, he three or four times repeats the Word *speedily,*winch expresses the Shortness of the Time which he himself, or  
any body else, had to view the Parts of the Carcases we are  
now fpeaking of, for fear, no doubt, of being surpris'd in an  
Action, which must have struck Terror into the Spectators, and  
must he own'd to he, in iej own Nature, none of the most  
agreeable. In short, the Pains *Galen* is at to specify all the other  
Means of learning Anatomy, which we have mention'd, suffi-  
ciently prove, as we heve already observed, that, in these Days,  
regular Dissections of the human Body could be made but Very  
rarely, and with a great deal of Difficulty. A collateral Proof  
of this is, that such Dissections were not publickly made in the  
Schools of the Physicians; for we may well suppose, that if  
they were made in any Part of the World, it mint haVe been at  
*Alexandria,* the Capital of *Egypt,* where the Custom Us open-

ing the Dead, in order to embalm them, might bare been flip-  
posed, in some measure, to reconcile and inure them to **the**Horror which attends a complete Dissection: But we do not  
find, that any thing of this Nature was practised there since the  
Days of *Herophilus* and *Erasistratus,* or of the antient Kings of  
that Country; All that was done in this respect, eVen in that  
famous Medicinal School which flourished in the Days os *Galen,*was to teach Osteology upon human Skeletons, which  
might have been Very antient. If the Masters of this School  
had exhibited, upon human Subjects, all the other Parts of  
the Anatomy of Man, *Galen,* and a great many other Au-  
thors, had not sail'd to acquaint us with it, in numberless  
Passages. AS for those Passages from many Authors; which  
have,- since the Time of *Riolanus,* heen advanced to prove, that  
in the Days of Antiquity human Dissections were practised, it  
is easy to shew; that almost all of them heve a Reference to  
whet pass'd long hefore the Times in winch these Authors wrote;  
and that the Accounts handed down of *Hcrephilius* and *Erases  
stratus,* might have laid a Foundation for all that has been said  
upon that Subject. But, to return to *Galen-,* taking it for  
granted, that he dissected some human Bodies, yet nothing is a  
more convincing Proof of his not haying dissected a sufficient  
Number, than his describing, in several Passages, the Parts of  
Apes, or some other Animals, instead of thofe of a Man. This  
has heen clearly shewn by *Visulius*; and those who have main-  
tinned the contrary, have been miserably blinded and misted by  
then superstitious Attachment to *Galen. . . --*

. But tho' *Galen* has sometimes confounded the Parts of Beasts  
with those of Men, his Anatomy «nevertheless a Very valuable  
Work,- *Fesolius* himself had a high Veneration for it; and,  
indeed, it mutt he own'd, that nothing could set the Merit of  
its Author in a fairer or truer Light than this Piece ; if it he true,  
as he says, that no one had wrote well on Anatomy before him,'  
and that he had made many important Discoveries in this Branch.  
os Physic. It is, indeed, possible, that, considering his Attach-  
ment to Anatomy, he might have made some Discoveries of his.  
own in that Science; tho', at the same time, his Propensity to  
commend himself must render, every thing he says, concerning  
himsels, suspected : But, the Truth is, whether he was the first  
who placed Anatomy on a good Foundation, or whether he  
raises ins own Character on the Labours of others ; from which, .  
at the same time, he has not drawn all the Advantage that could  
haveheen wish'd ; yet still 'tis very certain, that we should have  
suffer'd Very considerably if all his Anatomical Works had heen  
lost, since they are the only remaining Monuments of all that  
the Antients wrote upon that Subject; for what else we find,  
of that Nature, is-scarce worth Notice, if we except whet  
*Aristotle* has given us upon that Head. 'Tis true, *Galen* had  
not attain'd to Perfection; but neither can the Moderns pre-  
tend to that; and 'tin probable, that, without those *Lights,*with which he supplied the Very Men who have censur'd him,  
we should have still been in the Dark, with regard to a great  
Part of that which he has clearly demonstrated. *Galen’s* two  
principal Treatises upon Anatomy are, his *Anatomical Admini-..  
stratums,* and his Book *On the Use of the Parts of the human  
Body.* The former contained fifteen Books, os winch the six  
last are lost: The latter, which we have complete, contains  
seventeen. We have also a Book of his, which treats *Of the  
Bones* in particular; another. *On the Dissections of the Muscles*a third. *On the Dissection of the Nerves,* which is imperfect; **a**fourth. *On the Dessection of the Feins and Artcries*; a fifth, in’  
which the Author proves, in Opposition to *Erasistratus, That  
thcre is Blood in the Artcries* ; a sixth. *On the Anatomy of the  
Matrix* ; a seventh. *On the Organ os. Smelling*; an eighth and  
ninth. *On the Usefulness and Causes of Respiration* ; a tenth **and**an eleventh. *On the Motion of the Muscles* ; a twelfth. *On the  
Formation of the Foetus* ; and two others. *Concerning the Seeded*without taking into the Account whet we find concerning Ana-  
tomy, in his .Books *On the Natural Faculties,* and elsewhere,  
scatter'd up and down his other Works. *Galen* wrote se-  
Veral other Books, which are lost; in some of which he  
treated *of the Anatomy of Hippocrates,* and in others of that  
of *Erasistratus*; in a third Work he treated of the *Dissection of  
dead Bodies* ; and in a fourth *concerning that of living Animals.*It were to be wished, that all these had reach'd our Hands, bur  
especially those Pieces relating to the Anatomy of *Hippocrates*and *Erasistratus* ; as also the Abridgments he made of the Ana-  
tomical Works of *Lyeus* and *Marinus*; the latter of whem  
wrote twenty Books, which were abridg'd by *Galen,* and of  
which he has preserv’d the Tities, which are so curious as to lay  
a just Foundation for our lamenting the Loss os so great **a**Work. - ' - .

But tho' **we** have not all **the** Works of *Galen,* **yet those we**have, happen luckily to comprehend almost the Whole os his Ana-  
tomy; and if his *Anatomical Administrations* are not complete,  
the other Books we have mention'd, and especially those con-  
cerning **the** *Usee of the Parts,* supply that Defect; for this  
Book *on the Use of the Parts,* is a Master-piece, which has been  
justly admired in all Ages, and which sufficientiy discovers **the**Extent of its Author's Genius ; since .in it the Physician, as

well'aS the Philosopher,: may find Satisfaction. But what, in a  
particular Manner, strikes Christians with. Admiration . is,  
that seance, -.tho’ a Heathen', yetineknowledg'd One God, all-  
wise, all-good, and alt-powerfi4,:the Creator of Man, and of  
all other Animals, The Words he uses, jin one Passage of this  
Book, have , not only strong .Sense, but-also something os a  
divine and striking Energy, in them *[De. usu.Part. Lib.* 3I  
*Cap.* **IoJ :** *In writing these Boohs, SaysAae, I compose .d true  
and real Hymn to that awful Being, taho formed us all ,.and, in  
my Opinion,* **TRUE RELIGION** *dees not so much consist in sacri-  
ficing many Hecatombs on his -Altars, or in making him rich and  
costly Presents psi- the mostfragrant and exquisite Perfumes', as in  
being .persuaded .ourselves, ana endeavouring to persuade others,  
. that he is possessed of -unerring lfrifdom, irresistible Power, and  
allrdisseusutesuaodnefs:- For his having ranged all Things in that  
Order and Disposition, which is best calculated for the Continua-*

*- tion of theirorofpeativeBsingss and his having condescended to distri-  
bute his Favours to all his Works, is a glaring Proof of his Good-  
nes.s, which calls aloud suso our Hymns. . His having found the  
Means necessary for the Establishment ana Preservation of this  
beautiful Ordcr and Disposition, sis an incontestable Proof os. his  
FVis.dom, as his having done every thing he pleased, is of his Om-*

*. nipotence.* ’Tis not in one Passage only, that *Galen* talks in this  
exalted Strain ; these are fo much the genuine Sentiments of his  
Heart, that-he loses no Opportunity of inculcating them, and  
confuting, at the same time the *Epicureans,* who maintained,  
that this beautiful-and harmonious Frame of Nature was the  
blind Result os a fortuitous Concourse os Atoms. 'Tis.true,

. that [ *De usa Parti Lib.* IT. *Cap.* 14. J he opposes *Moses.*for having maintain'd, that the *Will,* or. sole Command of  
GOD, was the only Cause of all Things. *Galen* does not ad-  
mit os this Principleos *Moses,,* except the Will of GOD be taken  
in Conjunction with the Choice which he made of the most  
proper Materials, for. answering the particular ends, he had pro-  
posed to-himsels, after having known what was really best, with  
regard to the Arrangement of each Body ; for, says our Author,  
GOD could not have form’d Man out of a Stone, nor an Ox  
or a Horse.outOf a Parcel ofAshes. *Galen* did not reflect, that,’  
as GoD was the Master and Creator of Matter, so his Will was  
sufficient to snake any Part of it assume that particular Form,  
and .all those other Modifications, which were requisite for;  
answering his ends.. *Is Epicurus,* bewitched aS he was with  
his Atoms, had acknowledg'd the Supreme Cause of their Ar-  
rangement, - he would have reason'd better upon this Subject than-  
*Galen*; hot'*Galen* was misted *lig. Plata,* or *Aristotle,* and not by

*. Epicurus, suet" . . \ . .. . si . '. .*

**. ’ .'i** The younger SoRANUs EpHESItrs,

*. ' - l* **'. J '. i ' . - ' : ‘**

was contemporary withGaAx; he first practised Physic at *Alex-.,  
aastria,* and afterwards at *Rtjmey* He wrote a . Treatise on the  
-Disordersof Women. .

*There* is a Treatise on the Uterus, printed in *Greek Rt Paris,*I55I. which is supposed to hea Fragment of the Book of *Sora-  
nus* aheve-mention'd.

In the *Fenice* Edition of *Visullas,* 1604. the Anatomy of the  
Matrix, - from *Soranus,* is publish'd *pri-s.atin.* And the same  
Treatise was printed, together with the Works *Ds Theophilus  
Protafpatarius,* at *Paris,* I556. *Suo.'*

**THEOPHILUS PROTAsRATARIUS,** or rather PRO**TAs-  
- --C- PATHARIUS, i-**

a *Greek* Anatomical Author, lived, according to *Fabricius,* in the  
Time of the Emperor *Heraclius:* He was undoubtedly a Chri-  
stian, and probably a Monk, as he is styled in some antientManu-  
scripts. He wrote five Books, περὶ κατασκευῆς ἀνθρωπίνου  
σώματος. *Os. the Fabrsc of the' human Body,* in which he is  
said to have epitomiz'd’ excellently GW«r *of theUse of the Parts ;*and besides mentions some things not to be found in any pre-  
ceding Author. Thus he asseris, that the first Pair of Nerves,  
arising from the first Ventricles of the Brain, is extended to both  
the Nostrils ; and that by means of these. Smells are convey'd  
io the Brain. I ὰ so: . - ...

' Thus also he says, that two Muscles are concern'd in shut-  
ting the Fye-lids, . but that they are open’d by one only.

’ According to him, the Substance of the Tongue is mus-

. eular. ~ τ

He also first descrihed a very strong Ligament, which is corn-  
Inori, to, and fixes all the Articulations of the .Vertebras. This  
Passage is Very remarkable, ' and, as it may serve as: a Specimen  
of his Work, T shall insert.Ied Ἐπειδὴ δὲ καὶ κήπταν ἐμελλεν ο  
ἄνθρωπος, καὶ ἀνανεήειν,ἄκ ηρκέθη' ή ἀγαθή σίν Θεοῦ πρα'νοια εις μονουρ  
τῆς κατὰ μερος συνδοὐρτας δεσμης τίς σπονδύλουστ . ἀναχκαία γάρ  
*Kt fr* ΐχυρὰ ἤ χράύσ άλαί ἔξωθεν μὲν τῆς ἀκάνθης της ῥάχεως,  
ἐπέθηκε σύνδεσμον, ξανθὸν .μὲντη *yfetiZ, r&u&yesmsmhe* δὲ τη οῦσίῳ,  
ἀπὸ κεφαλης ἄκρας συνδῦντα ἀπάσας διαρθράσεςς τῶν σπονδύλων  
κοινὸν σύνδεσμον. . ' , -

*: But as it is necessetrsefor a Man to bend himselfforwards, and  
backwards, ip did not seem sufficient t0 the good. Providence of*GoD *io s.urnisu each particular Articulation of the Vertebra with  
proper Ligaments, which, however, dre very ncoriscar-i. and of*

*great Use; but, besides these, it added, mt the Outside oftdo Spine  
of the Back, a Ligament of a yellow Colour, and api a ngrqyeo-  
cartilagineous Substance, as a common Ligament t0 dll the Arti~  
eulations of the 'Virtebra of the Spine. -*

. 'Tis probable, that this Author also knew, that the Substance  
of the Testicles is Vascular; for he takes Notice of a prodigious  
Number of capillary Veffeis, as fine as a Spider's Web, which  
he says, are dispersed in the glandular Substance ut chete  
Parts. ' ’

rv This Work of *Theophilus* was publish'd at *Paris in Greek, in*I555- Sw\* Dr. *Douglas* informs us, that it was also publish'd in  
*Greek* at *Paris,* I54O. Bur, I am afraid, this may he a Mistake ;  
for *Pander Linden* and *Fabricius* inform us, that the *Parti*Edition of I540. is only the *Latin* Translation of 7*unius Paulus '  
'Crajfus ,* but aS I have never seep this Edition, I cannot deter-  
mine it. *Fabricius* has given thin wholeTreatise in *Greek* and  
*Latin,* at the End of the twelfth Volume of lim *Eibliotheca  
Graeca. . -- so ' ’ - - - - . .*

The above-rnention'd Tranflation was also publish'd at *Venice,*I536. *Suo. nt. Basu,* I539. 4to. and, with some other Authors,  
at *Basil,* 158I.

" .. This *Theophilus* is also Author of several other Medicinal  
Treatises. . -

: The next Anatomical Author IS  
**ORIBASIUS. '**

He, in two large Books, has described all the Parts then known,  
of the human Body, and assign’d the proper Office to each of  
them ; but he has added little to what *Galen* has discoursed os  
in his Anatomical Works ; and upon the account of thin Trea-  
tise, rather than os any other of his Writings, he deserves the  
Name given him of *Simia Galeni,* the Ape of *Galen.* Only  
one thing we find, -which is either omitted by *Galen,* or is  
lost, together with some other of *Galeofs* Works, the first  
Description of the Salivary Glands, which is this: On '  
" each Side os the Tongue lie the Orifices of the Vessels,  
" which discharge the Spittie, and into which you may pur  
" a Prohe. These Veffeis take their Rise from the Root of.  
".the Tongue, where the Glands are situated. They riso  
" from these Glands, in much such a manner as Arteries usual-  
ly do, and convey the Salivary Liquor, which moistens the  
" Tongue, and all the adjacent Parts of the Mouth." See  
**ORIBASIUS. . - '**

**NEMESIUS**

is: an Author' whose Name must by uro means he omitted  
in a History of Anatomy. He was Bishop of *Emis.su,* a City  
of *Phoenicia,* at the latter End of the fourth Century r He  
wrote a Treatise περὶ φύσεως άνθρώπου. *Os. the Nature of Man,.*of which there have been the following Editions:

*. Antverpiae,* I565. *Svo. in Greek,* with the *Latin* Trandin-  
tion of *Nicasius Ellebodius. ‘*

*.: Oxon,* I67I. *Svo.. Greek* and *Latin.*

*Pander Linden* and *Douglas* mention an Edition at *Antwerp,*1584. *Suo.* but *Fabr’ocius* takes no Notice of it.

A *Latin* Tranflation by *Georgius Falla,* was printed at *Ant..  
lumerpo* X538. -

- An *English* Tranflation was printed *London,* I636. *Suo.*

As to the Anatomical Discoveries of *Ncrnesius,* Dr. *Freind*makes the following Reflections:

- The *Oxford* Editor ascribes two Discoveries to him, one of  
which was the most considerable that ever was made in Physic.  
The first is concerning the Bile, winch is constituted, as Na.,  
*mesius* says, *not only for itself, but for other Purposes', for it  
helps Digestion, and contributes to the Expulsion of the Excre..  
meats; and thcres.ore it is, in a manner, one of the nouri/hing  
Powers ; besides, as a vital Faculty, it imparts a Sort os. Heat  
to the Body. And, for these Reasons, it seems to be made flor  
itself-, but, because it purges the Blood, itsueems to be formed for  
the fake os. the BJond.s* Here, says the Editor, rhe System ns  
the Bile is plainly and accurately deliver'd ; that very System,  
which *Sylvius de de Boe,* with so much Vanity, boasted he had  
invented himself .. .And, indeed, so sar is true, that here is the  
true Foundation of.byZbrus's Reasoning; and .if this Theory he  
of any Use in Physic, *Nemesius* has, I think, a very good  
Titie to the Discovery. But there follows a much more ma-  
terial Point; and the Editor, contends, that the Circulation  
**os** the Blood, an Invention which the last Century so much  
bragg'd of, was known to *Ncrnesius,* and described in very plain  
and significant Terms, which .are these *-.The Matson of the.  
Pulse takes its Rife from the Heart, and principally from the.  
Left Ventricle of sit.: The Artery io, with great Vehemence,  
dilated and contracted, by a Sort os. constant Harmony and Order.  
While it is dilated, it draws the thinner Part of the Blood front  
the next Viins, the Exhalation or Fapour of which Blood is made  
the Aliment for the vital Spirit; but while it is contracted, it  
exhales whatever Fumes it has through the whole Body, and by  
secret Passesges ; so that the Hiart throws out whatever is fuli..  
ginous through the Mouth, and the Nose, by Expiration. .*

- Upon tins single (lender Proof does he attriiimg this .great.  
Discovery of the Circulation to *Nemisiuss,* and thure'who have

insisted, that-it was known both to *Hippocrates* and *Galen,*have full as good Arguments on their Side. I will only say  
this, that from this very Description, and from what the same  
Author says of the Liver in the same Chapter, that it ministers

’ Nourishment to the Body by the Veins, one may demonstrably  
infer, that *Nemesius* had no Idea os the Manner in which the  
Circulation of the Blood is performed.

It must be remarked, that, from the Time of *Galen,* to **the**Beginning os the fifteenth Century, Anatomy made but very  
flow Advances. For most thet the lower GrzftL have said on  
this-Subject, is collected from *Galen.* And the *Arabic sparse.*tomy must have had the same Source, as Dissections of human  
Bodies, we are told, were not permitted by the *Mahometan*Religion. The Books os Anatomy, which the *Arabians* call  
*' Tasekrih,* most in Esteem amongst the Orientals, are -those of  
*Ben Sina,* whom we call *Avifenna,* of *Rhazes .,* and *Ebn Ha-  
man.: Hirbelot. . ' -* i; .. ...

The next Anatomist which occurs worthy of Remark, is

**' ' MUNDINUs, '2.**

a *Milanese,* according to *Douglas,* and *Freind,* who made  
some new, the’ rude Efforts, to improve Anatomy j About :  
I315. he compos’d a regular Body of that Science; and as  
he was a Dissector himself, interspers'd several Observations  
and Discoveries of his own, especially relating to the Uterus.  
This Book reviv'd, in some measure, the Study of Anatomy ;  
and was so much in Vogue till the Restoration of Learning,  
that the Statutes of *Padua* allow'd os no other System to be  
taught in their Schools.

*- Mundinus,* in describing the several Parts of the human Body,  
specifies their Places, particular Modes of Situation, Number,  
Appearance, Substance, Qualities, Bulks, Coats, Ligaments,  
- Uses, Inconveniencies, Actions, and the Disorders to which  
they are subject.

: He treats of the Viscera pretty largely, but touches very  
superficially on the Nerves and Blood-Vessels. He only de-  
scribes the abdominal Muscles, and contents himself barely

- with making mention of those employ'd in Respiration. -

He seems to have been a fond Admirer of the Anatomical  
Works of *Galen* and *Avisenna,* tho' at the same time he doos  
' not fall in with their Sentiments upon every Occasion.

- He observes, thet larger Veins and Arteries are distributed to  
the Penis and Tongue, than to any Other Parts of the Body of  
an equal Bulk.

’ The Testicles of Women were, in his Opinion, full of  
Cavities and glandular CanmcleS, in which a certain salival  
Humidity was generated, which was the Source or Cause of  
that Sex's Pleasure in Venereal Enjoyments.

He mentions, that seven Celis are found in the Matrix, the  
Mouth of which resembles that of a young Whelp, or, rather,  
that of a grown Tench ; and that towards its Surface there was  
*Velamentum vel Pudicitia :,'* or, rather, as it is in some Editions,  
*Velamen Subtile quod in Violatis rumpitur,* a flender Covering,  
which is burst upon the first Coition ; by this he, no doubt,  
meant the Hymen..

The Neck of the Uterus was, according to him, a Palm in  
Length, broad and dilatable, with Wrinkles, or *Ruga,* resem-  
bling Horse-leeches, for the sake of Titillation.

He took the *Fulva* for the Extremity of the Neck of the  
Uterus ; upon winch Occasion he takes Notice of two Mem-  
branes near the Orifice of the Bladder, by winch the Nymphae  
are in all Probability meant.

The Ducts of the Ureters into the Bladder run, according to  
him, obliquely, that is, hetween one Coat and another, that  
" the Return of the Urine to the Kidneys might he prevented.

He calis the Valves, belonging to the Orifices of the Vesseis  
of the Heart, *Ostiola,* or small Doors.

He publish'd a Book under the Title os *Anatome omnium  
humani Corporis interiorum Membrorum, ex* the Anatomy of all  
the internal Parts of the human Body. -

This Piece was printed, *Papia,* 1478, *Fol. Bonon.* 1482.  
*Fol. Fenet.* I5O7. *Fol. Argent.* I509. *Papiae,* I5I2. *Ssuart.  
Lugd.* 1529. *Oct. Murpurgi,!.^!.. Quaeant. Argent.* 1513.  
*slsussm. Vi net. ssemo.* corrected by *Carpus..* It also appeared  
with *Isetham's Fasciculus Medicinae, Anno.* I 5O0. *Fol.*

.. The next Anatomical Author/ we meet with, was

i **JOHANNES DE CONCORIGGIO,**

a *Milanese,* who dy’d in 1438.. His Works ware printed at  
*Fenice AD* 1515. and 152I..

**\* ALEXANDER BENEDICTUS**

flourished about I495. - He was os *Ferona,* and cultivated  
Anatomy. He wrote a Book under the Tide os *Alexandri  
Benedict. Physici Anaiomia, five de Histaria Corporis humani,  
... Libri* 5. ' Printed Εμά, I527. *Oct. Argentorati,* 1526. *Oct.*

*Parisiis,* 1514φ His *Epstst. Nuncapat.* was printed *Vines.*' I497. and his *Opera Medica, Venet. Tpspsse. Folio. Basil,.*‘ \*539- *lsusurt. & FA. Did.* I549. *Fol.* His *Historia Cor-  
’ ports humani,* **together wish some of** bis Collections, QT **Apho-**

risms, ‘ was printed *Anna* I527r Ι2ιζισ; but the Place where,  
is not mentioned. - ? . - --

He mentions, that the yellow Bile flow'd from the Gali-  
bladder *to* one particular Part of the Stomach.

He observ'd two Foramina, or little Holes,- hard by the Uri-  
nary Passage in Women, which he salfly asserts to he the  
Orifices of Veins, and from which, he said, a certain Humour  
flow'd, which was not prolific. -

... About the same Time liv'd -si’’.'

***ALEXANDER ACHILIKUS,***

*ess Bologna.* His Annotations On the' Anatomy *IA Mundinus*were published, together with the *Fasciculus Medicina Ju-  
nannis de Keiarn* at *Venice,* 1522. *Fol.* . And his Treatise  
*de humant Corporis Anaiomia* was published at *Venice,* 152I.  
*quarto. ‘ :*

- He is said to have discover’d the Malleus and Incus of the  
internal Ear. -

**JOHANNES,DE KETAM**

above-mentioned treats on several Anatomical Subjects. His  
Works are published at *Fenice,* I495. I5OO. and I522. *FOL*

**GABRIEL DE ZERIS,**

of *Virona,* flourish'd in the latter End of the fifteenth and  
Beginning of the sixteenth Century. His Anatomical Pieces  
were published- *Penet.* I502. and I533. *Fol.* and *Marpurg.*

I537. and I545. *Quarto,* together with the Anatomy of  
*Mundinus. .*

**GUIDO DE CAULIAcO**

was a Native of *France,* and studsid at *Montpelier* under  
*Raymund.* He flourish'd in the Year I363. at which Time  
he wrote a large Body of Surgery. His Works, under the  
Tide of *Chirurgia Tractatus Septem cum Antidotario,* were  
printed *Fenetiis,* I49O. I5I9. I546. *Pose Lugd.* I572. *Oct.*I585. *Ssuarto. Penar.* I499. AoZio. *Lugd. I559.*

He first taught, that Incisions about the Eye-brows should he  
made in the same longitudinal Direction with the Body itself,  
and not in that of the *Ruga,* or Wrinkles of the Forehead ;  
because the Muscles which serve to move the *Supercilia,* or  
Eye-brows, run in the former and not in the latter Direction.

With regard to the *Os adjutorium, or Humerus',* he ad-  
vanced some Things which had the Appearance of heing new ; \_  
but they may be more justry ascribed to *Galen,* the great Re-  
storer of Anatomy, as will plainly appear from his Works.

I heve now trac'd Anatomy from its Origin, to the fifteenth  
Century. But the Industry os the Revivers of this Science in  
the sixteenth, which had, froth the Time of *Galen,* lain in a  
great Degree uncultivated, will furnish ns with more frequent  
and ample Discoveries, tho'It must he confessed, that many  
have been pretended to he made, which were known even in  
the Insancy osAnatomy. . ‘ .

**..JACOBUS BERENGARIUS CARPE Ns Is**

was the great Reviver of Anatomy. He is distinguish’d  
with the Epithet *Carpensis* from the City *Carpi in Italy ; he*is likewise called *Carpus* alone, and *Jucobus Carpus,* and by  
*Fallopius, Jucobus Carpensis.* But these three last-mention'd  
Names he assumes to himself in his *isagoge.* He flourish'd in ’  
the Year I522. and was Professor of Anatomy and Surgery  
in the University of *Pauia.* His Commentaries upon the  
Anatomy *of Mundinus* were printed *Eononta,* I52I. *quarts.*His Anatomy was printed *Bononia,* I523. *Quarto. Colonies,*1529. *Oct. Argentorati,* I533. *Oct. Vienet. E535. ssuarto.*His Practical Anatomy was tranflated into *English* by *FL  
Juchsen,* and printed at *London,* I 6 64.

He was the first that used Unction with Quicksilver, sor the  
Cure of the *Lues Vinerea,* and became immensely rich by his  
Practice that way.

He first discover'd the *Eephysis, Cx* Appendix of the *Intesti-  
num Caecum,* which he calls the *Additamentum Colis,* and under  
that Name describes it at Length.

He denies that the seven Colis of *Mundanus* are to he found  
in the Uterus, and admits only of one Cell or Cavity.

He was acquainted with the sublingual Glands, and their  
Ducts. He thinks that the three Divisions in the *Musculi Pacts  
os* the Abdomen are the Tendons of three Muscles, serving for  
**the** Contraction of the Abdomen. .

He first discover'd Caruncles in the Kidneys, resembling **the**Nipples of a Breast. \*

Thet Line which now goes by the Name of the *Linea Alba,*was by him. called the *Linea Centralis,* because it reach'd along  
the Middle of the Belly.

He thought that\*the *Procejsus Mamillares* were not, on ac-  
count of their, excessive Softness, to he reckon'd among the  
Nerves.

Concerning the Ear he has these Words: " Two little  
" Bones are adjacent to this Membrane, [he means the Tym-  
" PanumJ which, heing mov'd by the undulating Air, mutu-

" ally strike each other, and, by their Motion, excite what  
we calf *Sound* in the Ear. This is the real Structure of  
" the Parte, which,’though Very remarkable, has yet been  
observed by few.’’ ; . ς .ῖ

He is therefore unjustly thought by some to he the Discoverer  
of these little Bones,, since he assigns the same Use to them that  
others have done before him T and, I which is still inore, be no.,  
where pretends to he the Discoverer of them. 'si .

**. -- JASON A PRATiS,. or PRATENSIS,**

was a Native of *Tseland, rtid* flourish'd in the Year I520. His  
two Books. *De Uteris'Nratise* primed’ *Antnuerfi.* ‘I524.. *Nsiarto.*

*' Anastelodami, issSI. PQ-mo.* His Book *De Parturiente et Partu*was printed *Antwerp.* I527. *Oct so Anostclad.* I657. *seleno.*

ί ANDREAS LACUNA ς - I

was a Native of *Segovia* in *Spain,* and flourished about the  
Year T-52.' His *Anatomica Methodus* was sprinted Parr/l  
I535. *Octavo.* His *Epiiorne Galeni Pcrgameni Operurn, in  
quatuor Partes degesta*, was printed *Basil.* I55I. *Folio. Ibid.*157 I. *Polio. Argentorati,* I6O9. *Folio. Lugde* I 553. Ish/to.  
4 *Vol. '* Y δ᾽ ‘ ' τ Y .

When talking of the Tongue, he expresses himself thus ;  
" ’Tis a Circumstance which well deserves our Consideration,  
" that Nature only bestowed a *Frenum, or Bridle,* upon the  
" Tongue and Privy Parts, aS if she .had intended, that Men  
" should he modest in theDse os hetin ’

When talking of the Lips, he maintains, that " they are  
" cover'd with the. inner Coat of the Stomach : And this,  
*' " sms* he, is the Cause, why, when a Nausea affects the Sto-  
" mach, the Lips become tremulous, and presage, a Discharge  
or by Vomit.\*1i -

. When talking of the Stomach, he says, that " its Orifice,  
" which is called the *Pylorus,* is not in its Bottom, but

*a* little higher, that the Part of the Food, which is not  
" sufficiently concocted, shay not flip down' into the Inte-  
" stines till it is sth " He likewise ascribes to it a *Constcectory  
Muscle. ' esc \_ /δ᾽ . si*

" He denies, that, in a good Habit of Body, the yellow  
" Bile is sent into the Stomach, because it is hurtful to its Fun-  
" ctions ; whereas the black Bile is friendly and beneficial to  
dur them ; and tho' in the Stomach there are no biliary Pores,  
" yet bilious Vomitings frequently happen, because the yellow  
" Bile is convey'd by a large Passage into the *Intestinum  
“'Jusunum,* which lies next to the Stomach ; and hence st  
" happens, that that Part, into which it is inserted, is always  
" observed empty ; and if at any time it is irritated by the  
" Acrimony os the Bile, it throws it out from it. Now as  
" the yellow Bile is inatnrally light and active, it oftentimes  
" sties upwards, and destroys the Functions of the Stomach,  
" unless it be forthwith discharged by Vomit. ”

. The Intestinum Ccecum, according to him, hangs like a sort  
**of** fill'd Stomach, in the Bottom of which there is no Orifice ;  
hut it has two Orifices, one by which it receives, and the other  
**by** which it discharges. L

- NICOLAUS MAsSA.

Tim.Anatomist was st *Vinetian* by Birth, and flourish'd  
about the Year I53O. His *Libor Introductorius Anatornia* was  
printed *Ferret.* I 536. *Quarto. frset Quarto.* His *Epistolae  
Medicinales* were printed *Fence.* I542v *quarto.* I550. *sisuarce.*Ἕ558, *quarto. t, .*

*Iriolanus,* and some others seduced by his Authority, aserihe  
the Invention of the *Musculi Pyramidales* to him. But they  
have nothing to support their Opinion ; for that Muscle which,  
is taken for the Pyramidal Muscle of *Mas.su,* is more properly  
called the Cremaster Muscle, which it really Is.’

The *Septum Scroti,* winch some Moderns boast of as their  
own Discovery, is elegantly described by him in these Words :  
" ThisBag she means the Scrotumj has, hesides, an interme-  
" diate Membrane, which divides the Right Testicle from the  
" Lest, so that the Scrotum has two Sinuses. Hence it hap-  
. " pens, that it is sometimes distended on one Side by a De-  
" ffuction of Humours, or a- falling down of the Intestines,  
" whilst the other Side remains in its natural State. "

He deny'd the Existence os *t&aePanniaulus Hymanaus,* which,  
according to *Muudinus,.* block'd-up the Mouth os the Matrix ;  
and in its stead maintain'd, that some *Ruga,* mutually con-  
nected with Veins and Ligaments, were relaxed and broke,,  
when a Woman was deflower'd.

... He describ'd the Ducts of' the renal Caruncles, thro'which  
the Urine is strain'd, and which are now call'd the Tubuli  
‘Urinarii. *Carpus.*

. Concerning the Anatomy, os the Seminal Vessels,: he exprefly\*  
- affirms, that the spermatic Vein and Artery do-not at all meet,  
but pass separately to the Testicles.

He demonstrates, that the Substance of the -Tongue is muse  
cular, and that it is cover'd with a double Skin.

He also asserted, that the Neck of the Uterus was rnnfrular,!  
and: endow'd with a Voluntary Faculty, He sakes the *Mem-*

*brana Frontis Carruss.a* for a real Muscle ; and asserts, that the  
*Ossicula auditus,* which strike the Tympanum of the Ear, were  
known to Anatomists in the Time of *Achillinus.*

**JOHANNES GUINTERIUs,**

This Anatomist is styled *Andernacus,* because he was bom  
*in Andernacuni,* a Town of *Ubich* on the *Rhine,* in the Year  
1487. His Works, under the Tide Of *Anatomicarum Institu-  
tionum ex Galeni Sententia, per Johannes Guinterium Andcr-  
nacurn Medicum, Libri quinque,* were printed *Basil.* I536.  
*Octavo.* I539. *ldsuarce. Patavii,* 1558. *Oct. IVittemberg,*I6I3. *Octavo.* And his Piece *De Medicina veteri et 'nova,*was printed *Basil.* T57I. *Fol.* 2 *Vol.*

He first call’d that glandular Body which is situated in the  
Middle of the Mesentery, and consists of a soft and yielding  
Substance, the *Pancreas.*

He boasts os his being the Discoverer of the Complication of  
the spermatic Vein and Artery, a little hesore their Insertion  
into the Testicles , which, he says, was never observ'd before  
him; and which, he adds, he shewed to *Vifalius,* when he was  
studying Anatomy at *Parti.'.*

The Uterus, he said, had two Sinuses, corresponding to the  
Number of the Breasts, not divided by an intermediate Mem-  
brane, but terminating in one narrow Cavity, which he call’d  
the Neck of the Womb, which Neck, he said, terminated at  
the *Sinus Muliebris,* which he also call’d the Pudendum.

He also admitted of the *Membrana Allantois.*

He asserts, that the Muscle which surrounds the Neck of  
the Bladder, consists of transverse Fibres, -and has Various  
Offices ; for, first, it shuts the Bladder, and then, aster the  
Discharge of the Urine, contracting itself every Way, it pro-  
pels what-remains in the Meatus Urinarius.

**LUDOVICUS BONNACIOLUS.**

This Anatomist was a Native *of Ferrara,* and flourish'd  
about the Year I53O. His *Enneas Muliebris* was published  
*Argentin. Pcsersi, Octavos*

He first described the Nymphae and the Clitoris as separate  
and distinct Parts, which had not heen distinguished by the  
the Antients.

-He said, that the Mouth of the Uterus resembled in Figure  
the Glans os the Penis, The Testicles, according to him,  
were not perfectly spherical, but resembled a Sphere gently  
Comprefied on each Side.

**. . u JOHANNES FERNRLXUS.**

ς This Author is likewise styl'd *stmbianus,* because his Fa-  
ther was a Native of *Amiens in France ;* but he himself was  
horn at *Clermont,* in the Year I5O6. according to *Goelicke ;*but according to *Douglas,* in his *Bibliogr. Anat. Specim. in*the Year 1485 : But as this is a Controversy of too trissing a  
Nature to deserve Regard, we shall only observe, that he was  
a Man of extensive Learning, and so successful in his Practice  
aS a Physician, that he became the Oracle of the Age in  
which he lived. But as he was no profess'd Anatomist, and  
only Casually interspersed some Descriptions of particular Parts  
of the hutrian Body, with his Physical Writings, he comes not  
properly under our present Consideration. . His Book *De Nar  
turali Paete Medicina,* was published *Paris.* I542. *Fence.  
iSdst. Octavo. Lugd.* I55I. *i6mo. Tuiet.* I554. *Pol. Mug.*And his *UnivcrfdMedicina, sive Opera Medicinalia,* was printed  
*Panet.* r564. *quarto. . Lutet.* I5fiy. *Pol.\_ Francos..* 1592.  
*Fstl.* Ifio3. *Octavo. Harrnovia,* I6.I0. *Fol. Paris.* I602»  
*FA. Eugd. Bai.* 1645. *Octauo.* 2 *Vol. Trajecti ast Rhcnurn,  
^liedrio. Genstv.* I644. *Oct.* I679 *Fol.* Ih8o. *Fol.*

He advanced nothing remarkable, in’ point of Anatomy,  
unless that, he deny'd thePeritontenmto he perforated with  
small Holes.

**LUDOVICUs VASSAEUs.**

- This Physician was a Native of *Caialoiiia,* and rhe Scho..  
lar of *Sylvius.* As he observed, that what *Galen,* and other  
learned Men, had wrote upon the Subject of Anatomy, was  
so scatter'd up and down, that it was'not easy to eoino at  
it, he resolved to redress this Grievance, by compiling cer-  
tain Table» to pave tho Wby3 as. it were, to that Divine  
Work of *Gated, DeTLsu Partiuni ',* .and, indeed, the Value  
of these TabIes is enhanced by this Circumftajtes, that there  
is scarce a single Part of the hnnian Body, how minute  
soever it he, that is not described in them; They were  
published finder the Title of *Ludovies fiafsai Gatalalaiensis  
in Anatomdn Corporii humani Tabulae Fduatuor, Lutet.* I340.  
X54I. 16.53. *frenet.* 1544. *Octi Lugd.* I560.. Ὀδ?.  
A *French* Edition- of them was also printed at *Paris, stSssSe  
Cctavdi*

**3- ANDREAs VEEALIUs, a**

This Anatomist was hernsat *Brussels,* .a Town of *Era-  
bant,* in the' Year I5I4i His superior Genius, in Cdnjun-  
ction with his indefatigable Application and Industry, soon

raised him to such a .Pitch os Anatomical-Knowledge, aS  
Tender'd him at once the Ornament os his own,, and the Ad-  
miration of suture Ages. As it is the Fate of all Sciences-to  
hapo their Votaries blindly and superstirioufly attached to the  
Opinions os some particular Author of Note, till some daring  
Genius Ventures to think for himself, and - endeavours to,.make  
.Authority fall a Sacrifice to Truth; so the Anatomists, at  
the Time *Pesclius* appeared,- were so much blindfolded .with  
the Authority os *Galen,* that to heve contradicted'him had  
been look’d upon as Heresy. *Vifalius,* -regardless os this tin-  
happy State os Things, ventur'd-to expose'the Mistakes, and  
correct the Errors, committed by- *Galen,* both in Physic and  
Anatomy,'but more especially the latter. \* Tut’aS there is a  
.Principle os Emulation interwoven with the very Frame and  
’Make os human' Nature ; so it must follow, that uncom-  
mon Merit must create, if not Enemies, yet at least Censurers,  
os Note and Distinction. This was the Fate of *Fes.alius:*Some distinguish'd Authors have charged him with Ignorance,  
Want os Honour, Vain-glory, and Plagiarism.

*Piccolhominus,* an Author os considerable Note, talks of him  
in this Strain : " When a proper Opportunity occurs, I shall  
sufficiently fliew, that whatever is good in that'large Vo-  
se lume wrote by *Vifalius, Lie Re Anatomica,* is borrow'd from  
*" Hippocrates, Aristotle, Gale,* and some others os the An-  
" tients, without the Author's so much as mentioning their  
" Names ; and that whatever Things are salse and erroneous,  
" which, indeed, are very many, are the Product os his own  
ignorance, and Impetuosity of Temper; and tho' he has  
secretly stole many Things from *Galen,* yet he never men-  
iC tons his Name, unless it be with a View to find Fault  
" with him. " . . ‘ .

The Confute os *Casus* upon *Fesclius* is still more remarkable.  
" We both lodg’d, says he, in the same Quarters at *Padua,*" at the Time when *Vifalius* Wrote and prepar'd his Book *De  
" Corporis humani Fabrica.* One *Aldinus funta,* a *Vinetian*Ci Printer, employ'd him to correct the Anatomical Works of

*Galen,* both *Greek* and *Latin* ; and for' that Purpose several  
" Emendations were sent him ; but he render'd *Gallum*s Text  
" more corrupt than it was before, with no other View than  
" that he might heve something to find Fault with." '  
. And tho' *Fallopius* owns him to be the Father of Anatomy,  
he yet carps at his Opinions almost every-where. -

*Columbus* talks thus of him I can't but be surpris'd, that  
" he, who on all Occasions lashes and chastises *Galen'* sor his  
" having describ’d Apes and Brutes, instead of Men, should  
" yet himself he so ridiculous as to describe the Larynx, the  
" Tongue, and the Eyes of Oxen, and not of Men, without  
" so much as ever giving a Caution with regard to it. He  
" also ascribed Muscles to the Epiglottis, which are only  
" found in Brutes. " *Eustachius* has also observed of him,  
CC That he described and delineated a Dog's Kidney instead of  
" a Man’s, \*'

*Arantius* styles him the common Master of Anatomists, but  
accuses him of having delineated the Pudenda os Brutes, on .  
account of the Scarcity of the Carcases of Women ; where-  
hy it happen'd, that *Vidicerda,* and those who immediately  
followed him, taking Things upon Trust, split upon the same  
Rock.. ' . ss

*Johans Bapt. Carcdn. Leon,* speaks of him thus : " It is fur-  
" prising, that *Vifalius,* whilst he accuses *Galen,* the Chief of  
" Physicians and Anatomists, os so many Blunders and Errors,  
" should yet himself be so justly liable to Censure in the same  
" respect : And, whet is nill worse, by these his Accusations,  
" he seems widely to have mistaken *Galen’s* Meaning; ascribe-  
" “ing to him Things he never so much as stream'd os, and  
" affirming that he deny’d those very Things which he  
" insisted on in the most distinct and 'explicit manner ; and  
" whilst he so often wonders at, and finds Fault with, *Galen,*An he himself deferves to he wonder'd at, and found Fault with."

" The Style of *Vifalius,* says *Pdolanus,* is ridiculously pom-  
" pous, and his Periods by far too long; so that he generally  
esc throws a greater Degree of Darkness upon things that are of  
" their own Natures too obscure. Besides, I suspect, that the  
*" Latin* of that Book is none of*Vesalius's,* but the Language  
" os some other learned Man, since his *Chirurgia Magna,* his.  
*" Examen Observationum Fallepii,* .and his littie Book *de Ra-  
se dice China,* are wrote in a quite different Style: ” And for  
this Reason, *Fallepius* thinks that his great Work is only fit  
for those who are well advanced in Anatomical Studies. l

But thefe sharp and ill- humoured Censures heve had riot more-  
Influence upon the Fate os *Vis.aliurs* Works, than a gentie  
Breeze os Wind would heve upon *Mount . Caucasius, or Athos*for his Writings ever heve been, and for oughtT know, ever  
will be,’ esteem’d, so long as Anatomy and Physic are thought  
necessary to the Good and Welfare os Mankind ; and that is, so  
long as human Nature endures.

His Work *De. humani Corporis Fabrica,* was printed *Based*1543. *Fol. ibid.* I555\* *torL* r5b3. *Vinet.* I568. *FoL Men.ibid.*I 604 *FA.* His *Anatomia* was printed *Francofurti,* I6O4-I632.  
*'testes. Lugd.* I552. I2mo. His *Epitome de humani CorporisFabrica*

*Librorum,* Mas printed *Basil.* I543. *Fol. Colenfoe. Agrippina.*I6oo. *Paris.* I560. Svo- *-.Wittebargee,* I582. 8vo. *Londini,.*

I 642. *Fol. De mada propinandi Radicis Chinee Decoctum,* was  
sprinted *Basil.* 1546. *Fol. Lugduni,* I547. i6mo.\_ His *Examen  
Anatomicarum Observationum Gabrielis Fallepii* was printed  
*Vineliis,* 1564.4to. The last Edition was *Vitalii Opera omnia,  
Lugdun. Batav.* 1725. *Fol.* See *Vander Linden de Sociptis*Afrrfrdfr,' and *Douglas’s Bibliothcece Anatomica Specimen.*

As for the Discoveries, with which *Visclius,* by his indefati-  
gable Labour and Industry, enrich’d Anatomy, if I was to enu-  
merate them all, I should not only find the Talk difficult in  
sttfelf, but inconsistent with iny present Design; However, not  
to pass them over altogether, he maintain'd, that “ The Penis

was connected at the Union os the *Ossea Pubis,* by a cer-  
" tain small Ligament.'' This Ligament was delineated by  
*Cajsiocius,* and our Countryman Cowper lately described and deli-  
neated it under the Name of *Ligamentum Penis Suspensorium.*We are.also, indebted to *Vifalius* sor the first Delineation of the  
*'Auditus Cisse,* or’Bones appropriated to Hearing.

He *first,* discovered, thet the Optic Nerve was not inserted  
directly in the Centre of the Pye,, but a littie to one Side. He  
likewise maintain'd, that the *Ligamentum Tores Femoris* was  
riot inserted into the Middle of the .Head of the Femur, but  
rather into the Side of it. I do not pretend to give the Lise.  
of *Vifalius* ; for that would requiro a Volume by Itselfr My.  
Design was only to shew the State of Anatomy, when, he.ap-  
pear’d, which, Γ hope, may be sufficiently known from the  
preceding Hints. .....

**CARoLUs STEPHANUS. ’ \_ \_**

This Physician was a Member of the Faculty at *Parse,*and, by the Assistance of *Riverius,* made such Advances in  
Anatomy, aS to acquire Credit enough to introduce *Galen’s*Doctrine, which was unknown to the Age in which he  
lived. He ’ alfo enriched Anatomy with some Discoveries,  
such aS the membranous Apophysis within the Liver, at the  
Origin of the Vena Cava,' lest the Blood, elaborated there,  
should regurgitate. He first os ail maintain'd, that .the  
*Oesophagus,* and *great Artery,* passed down through different  
Holes, though they lay Very near to one another, which was  
quite the reverse of whet *Galen* asserted. He says, that  
the *Membrana Carnos.a* is Visible in melted Fat; for, if you  
melt Fat before the Fine, you will observe a thick Mem-  
brane remaining. ' He accurately described the *Septum Scroti,*fust observed by *Majsia,* and gives it the Names , of Din-  
*phragma* and *Septum.* His Works under this Title, *De  
Dissectione Partium Corporis humani Libri tres, una cum  
Figuris et Incisionum. Declarationibus a Stephana Riuerio Chi-  
rurgo compositis,* were printed *Paris.* I545. *Fol.* and, in *French,  
Paris,* I546. *Pol.*

This in general is to be remark'd with regard to his Plates,  
that they are imperfect, and therefore not to be trusted to. .  
- He has six Representations of a human Skeleton, exhibiting  
the anterior, and posterior Views of the Body.' The first and  
second of which represent only the Bones, the third and fourth  
the more considerable Ligaments, and the fifth and sixth the  
Origins and insertions of the several Muscles. He has also two  
other Representations of the human Skeleton, exhibiting the  
Course of the Nerves. Two Figures represent the anterior, and  
posterior Parts of the Body, covered with their respective .  
Muscles, and every Muscle is hefides delineated by itself He  
has likewise a Delineation of the Vena Cava and Aorta.-  
He has also given a View of the Body aS cover'd with  
the Skin, illustrated with the genital Parts in Women, in  
eight Figures'; and towards the End os. his Work, laid down  
the several Parts os the human Body in the same Order in  
which they occurred to him hr Dissections.

**THOMAS VICARY.**

\* This Author was a Citizen and Surgeon of *London,* and this  
seems to be the most remarkable Circumstance in his Character,  
that he was the first who published any thing upon Anatomy in  
the *English* Language. His Book is called *The Englisumanstr  
Treasure, or the true Anatomy of Man's Body* ; and was printed  
*London,* I548. *ibid. ibid.* I587. 4to. *ibid.* I633.

**. THOMAS GEMINI.**

‘ This Man was a Foreigner, but settled in *London,* in QPa-  
lity os an Engraver in Copper. He only comes under our pre-:sent Consideration; sor his having first engrav'd the Figures of  
*Vifalius* on Brass, two Years after they were done in Wood  
in *Germany.* Though he was. a ikilful Artist, and a great  
Master of his Business, yet he is highly to be blam'd for sup-  
pressing the Name Of *Vesalius,* .and affirming, that the Worlc  
was the Product of his own Industry and Labour. By the Assist-  
ance of Mr. *Udal,* and other learned Men, (for he himself  
knew neither *Latin, Nnglijh,* nor Anatomy) he adorned his  
Pistes with *Ves.aliusts* Descriptions. There are three Editions of  
this Book, one inthe Reign of *Honry* theVIIIth, another under  
that of *Edward* the Vlth, and a third under Queen *Elizabeth.*

The Book is published under the Tide of *Csmpendiofa tstius Ana-  
tomia delineatio Acre exarata per Ths. Geminum, Londini,* I 545.  
*Fol.* and then in *English, London,* I553. *Fol. ibid.* I559. *FA.*

. JACoBUs Sylvius.

This Anatomist was born at. *Amiens in Psturdy,* in- the  
Year I478. and was afterwards the Scholar of *Tagaultius.* He  
was a great Admirer of *Galen,* and an inveterate Enemy to  
*Vesalius.* He heth enrich’d Anatomy with many new Dis-  
coveries; "and, particularly, .he was the first who discovered  
*these Valves which he calls Epiphyses, dr membranous Epiphyses,  
in the Mouths of the Vena Azygos, the .jugular, brachial, and  
crural Veins; at also at the Trunk of the Vena Cava, which rises  
.from the Lister.*

*Fabricius ab Aquapendenie* unreasonably claims the Glory of  
this Discovery ; hut he only described them more accurately,  
and from their Use and Structure gave them the Names of  
Valves, which to this Day they retain.

He was also the first who observed the *Musculus Femoris  
Quadratus, and ranPd it among the Mnseuli Quadrigemini,* as  
be calls them. . . -

He accurately describes the Origin of thet Muscle in the  
Thigh, which is call’d the *Museulus. Rectus. . . - -*

. He maintain’d, thet *the Tendent of the Musculas Plantaris,  
and Palmaris, were wanting in seme Subjects.*

But whet is surprising is, hisrcceding from his Master *Galen,*. in assigning the Origin of the *Musculus Rectus Abdominis.*

He mentions the large fleshy Substance in the Sole of the  
Foot, whichtuns out to the Sides of the Toes, and takes Νο-  
tice Of the *Musculi Pyramidales* arising from the Os Pubis, and  
calls them the *Muscculi Succenturiati*; and indeed he may de-  
servedly be said to be the first Discoverer of them.

He alfo takes Notice of the Glands at the first Division of  
the *Aspero Arteria,* as also of .two Glands at the Root of the  
*Larynx,* and of the glandular Substance of the *Pylorus.*

His *Opera Medica,* &c. were, printed *Colonia Allobrogum,*I630. Fol.

His *Depulsu Veseini Cuscesidarn,* &c. was printed *Parise* I56I.

- Svo. . - ,

His Piece *Ac Mensseus Mulierurn, Vents* I 556. 8vo. *Basel*tssi6? 4. . '.

His Piece, intituled, *Qrde et Ratio Ordinis in Legendis  
Hippocratis et scaleni Libris, Parise* I56I. 8νο.

**MICHA E L ΒΕ a v E τ us.**

.. This Physician was a Native *of.Spain,* and a.Man of an un-  
common Genius. Happy had it been for him, if he had con-  
fin’d his Researches within the Bounds of Physic and Philo-  
sophy ; but unluckily be went beyond bis Sphere, and plung’d  
himfelf into the deepest and most abstrusis Points of Theology :  
For be.publimid a Piece 'against the mysterious Doctiine ofthe  
Trinity, and that too at a very uulucky Juncture, I mean the  
Dawn of the Reformation. Upon this *Calvin,* the great  
Champion of thet Caufe, ufed his Interest to do him all the  
injury he could. And as true Christian Zeal had in these Days  
degenerated into a most hellish and most execrable Spirit of  
Persecution, he sound it no hard Task to get him condemned  
to the Flames; and the Sentence was accordingly, put in Exe-  
cution at *Geneva,* in the Yean I 553. His seven Books *de Tri.,  
nitatis Erroribus were* printed, at *Basti,* I53I. And his *Christia-  
nismi Restitutio* was printed St *Basel,* I 55 3. Though thefe  
Pieces made their Author fall an unfortunate Victim te a Spirit  
of Persecution then prevailing, yet," as ra Physician,, they will  
perpetuate his Name to all succeeding Ages S sinceain the fifth  
Book of the former of these Works, whicti treats of the Holy  
Spirit, thole Passages were found, which amount almostto a De-\_  
monstration, thet he was hettcr acquainted with the Doctiine  
of the Circulation of the Blond, than any preceding Anther,  
.dur There are,” fays he, “in the human Body, Spirits of  
" three different Kinds, the natural, the animal, andthevital;  
“ which are really nor;threb, hut two distinct Spirits. The  
"" vital is that which is communicated by Anastomoses from-  
"ς the Arteries to the Veins, in which it is called natural. The  
4. Blond therefore is. first,-whole Seat is in the Liver and Veins.  
" The vital Spirit is second, whose Seat is in the Heart and  
"Arteries. The animal Spirit is third, which is like a Ray  
" of Light,: and has its Seat in the Brain and Nerves.’? . .. -

Now to understand how the. Blood is the Life, he says,  
**" We** must first understand the substantial Generation of the  
\*" vital Spirit, which is compounded of,. and nourished by,. in.  
\*" fpired Air, and thefubtilest Part of the Blood. . The vital -  
of Spirit has its Original in the Left Ventricle of the Heart,  
by the Assistance of the Lungs, which chiefly contribute tin  
“ its Generation. It is a subule Spirit wrought by the Force  
\*? of Heat, of a florid Colour, having the Power of Fireso  
" thet it is a .sort of shining Vapour made of .the purer Part of  
" the Blond, containing within, in itself, the Substance of Wa-  
\*\* ter. Air, and Fire. It is made in -the Τ .tings, .by the Mix-  
‘ς tute of inspired-Air with what elaborated subtile Blond, which  
ϋ lirht^VftntnGlc Of IHr- ΜἌπτπ σ'ι-ΐΓητηττνθί/^ιτκιω TA TH/\* Τ eTr

" Now that this Communication is not made thn? the Septdin  
of the Heart, as is commonly believed, but the fubtile Blood

“ is very artificially agitated by a long Passage through the  
“ Lungs from the Right Ventricle of the Heart, and is pre-  
“ pared, made florid by the Lungs, and transfused out of the  
" arterious Vein into the venous Artery; and at last, in the  
“ venous Artery itself, it is mixed with the inspired Ain, and  
" by Expiration purged from its Dregs. And . thus at length  
“ the whole Mixture is attracted, by the Diastole of the Heart,  
“ into the Left Ventricle, being now a fit Substance out of  
" which to form the vital Spirin .. ' ,

“Now thet this Communication and Preparation is made  
" by the Lungs, is evident from the various Conjunction and  
" Communication of the arterious Vein with the venous Artery  
" in the Lungs ; the remarkable Largenels of the arterious -  
“ Vein does likewise confirm it, since it would never have  
" heen made of that Form and Bulk, nor would it have emit-  
". ted fo great a Quantity of very pure Blood out of the Heart  
" into the Lungs, if it had heen only for their Nourishment ;  
“ nor would the Heart have been this way serviceable to the  
" Lungs, since the Foetus in the Womb-is otherwise nou- -  
“ rished, by reason of the Closeness of the Membranes of the  
“ Heart, which are never opened till the.Birth of the Child,  
" as *Galen* teaches; S0 that the whole Mixture of File and  
“ Blond is made in the Lungs, inhere there is a Transfusion  
“ out of the arteriousVein into the venous Artery, which *Galen*“ took no Nonce of.”

Afterwards he fays, "" Thet this vital Spirit is transmitted  
“ from the Left Ventricle of the Heart into the Arteries of the  
whole Body; fo that the more subtile Parts get upwards,  
"\* where they are yet more relined, especially in the Plexus  
"« Retiformis, which lies in the Bafe of the Brain, where,  
“ from vital, it begins to' become animal, and approaches to  
\*" the proper Nature of the rational. Soul.” . .

The Circulation of the Blood is a Discovery of fucti Import-  
ance, that every one who gives the remotest Hints of it, has  
some Party to take him by the Hand, and canonize him as the  
first Discoverer. Thus *Hippocrates, Galen,* and a great many  
more, heve had their respective Champions in this Particular,  
who have pronounced boldly either one way -or the other, just  
as Whim and Caprice directed them. But as such a Turn of  
Mind is a Disgrace to Philosophy, and a Reproach to human  
Nature, whofe Glory and Dignity consist in shaking off  
Prejudice, and adhering inviolably to Truth, whefe-ever it cab  
be found, so we will not absolutely pronounce, that *Servetus*knew the Doctrine of the Blond’s Circulation, but certain it  
is, that the first Step made to this noble and useful Discovery  
was the finding, thet the whole Mafs of Blond passes thro’ the  
Lungs by the Pulmonary Artery and Vein. Now that *Ser-  
vetus* had a pretty distinct Idea of this Matter, is sufficiently  
plain from the foregoing Passages’, but be miked in too vague  
and indetermined a manner, to be esteem’d a full and uncon-  
tested Discoverer. The Glory of this was reserved for our  
own Country, which gave Birth to the divine *Harvey,* who  
first improv’d these, and the like noble Hints, into a radonal  
and consistent Theory, truly useful to Mankind, and absolutely  
necessary to farther dinprovements in rational Medicine.

**REALDUs COLUMBUS.**

- This Anatomist was a Native of *Cremona:* he flourish’d about  
the Year I54.4. and was intimate with *Vesalius,* whose public  
Lectures he had frequently an Opportunity of hearing. He is  
by some charg’d with want of Gratitude to *Vesalius,* from  
whom he is said to heve stole every thing that is valuable in his  
own Works ; but others maintain,- that be had a clearer Idea  
of the Parts than *Vesalius,* and described them more accurately ;  
and ’tis certain, that his *Latin* is very pure.

He was the first who wrote distinctly and accurately about  
the Caruncles in the *Vagina Muliebris.’ ' ' .*

- He was the first who made-mention of the Duplicature of  
the Peritonaeum ; and he affirmed,- that the Pleura was every-  
where double. He assumes to himself the Discovery of the  
*Tunica Innominata* of the Eye, and accuses all his Predecessors  
of Ignorance in that Point.. But *Douglas* thinks, that the CoSt  
of the Eye, which *Galen* describes under the Name of the  
*Tunica Sexta, is* the very Coat be means. *' --~y~* χ -

He also coasts of his having first discovered the third Bono  
subservient to Hearing. ‘‘- y ' . so.

He affirms of *Vesalius,* that he not only described, but pub-  
llekly diflectsd, the Tongue, the Larynx,, and the Eyes of  
Oxen, instead of these of Med ; and thet he himself was an  
Eye-witn.essof the Imposture/’ ' ' ’

As *Galen usdVifalius* exceeded in the Number of the Muf-  
cles of the Eye, so *Celumbus* is as remarkably desident in **thet**Point, since he determines, thet there are only five.

The Ufe, by him asoribed to the Lungs, deserves to he taken  
Notice of, for he thinks, that they were bestow’d on Animais  
for this Purpose, that the Blood and vital Spirit might be pre-  
pared and generated in them ; sot be thinks, that the Blond,  
heing attenuated bv Elaboration in the right Sinus of the

Heart, is carried through the *Vena Arteriosa* to the Lungs,  
where by them continual Motion it is agitated, still farther at-  
... tenuated, and mixed with that Air, which is drawn in through  
the Nostrils and Mouth, and carried through the Branches of  
. 'the *Afpera Arteria* to the Whole of the Lungs, which Air is

itself prepared by this Collision ; so that the Blond and Ain, -  
heing thus mix'd, are received into .the Branches of the *Artcria  
Venose,* and at last carried through the Trunk itself m the  
Lest Ventricle of the Hears, from which they are carried  
. through the Aorta in all Directions, to all the Parts of the

Body.

Since this Opinion is largely insisted upon by *Michael Servetus,*we have Reason to suspect, that *Columbus* borrowed it from  
**him.** This also *Galen* had advanced long before *Scrvetus,* where  
he says, that when the Thorax is contracted, the *Vinous Ante-  
yries,* which are in the Lungs, ‘heing on all hands pent up, and  
compressed, quickly throw out the Spirit contained in them;  
but that they receive some Portion of the Blond from the *Vena  
-Arterioso,* by minute and invisible Orifices.

His Works were printed under the Tide of *Realdi Columbi  
in almo Gymnasio Patavino Anatomici celeberrimi, de re Anato-  
.mica Libri quindecim,.Venetiis,* I55O. *Fol. Paris.* I572. 8VO.  
*Lugde Batav.* I667. 8Vo.

**JOHANNES VALvERDA.**

This Physician was a Native of *Spain,* and, in his Anato-  
mical Studies,- the Scholar of *Realdus Colandus.* He is said to  
have carried the Knowledge of Anatomy from *Italy* to *Spains.*He published the Tables of *Vifalius,* with their Descriptions  
somewhat inlarged in .the *Spanish* language, and added four ’  
ί new Figures to them ; the first of which exhibits the Direction  
and Progress of the Fibres which compose those Muscles, that  
cover the Fore-part of the Body. The second represents -a  
Woman big with Child. The third and fourth give uS a Pro-  
spect of- the -cutaneous Veins scattered up and down the anterior,  
and posterior Parts of the Body. But he is an Author of too  
small Note to be insisted upon at greater Length. Since the  
greatest Character we find given him is, that he was *rather io  
he commended for his Industry in propagating Anatomy, than for  
his writing well apon any Pari of it. : '*

**GABRIEL FALLOPIUS.**

This Anatomist was born *ati Modena iD Italy,* in the Year  
I49O. His Skill in Physic and Anatomy has Tendered him uni-  
versally admired. *Douglas* in his *Bibliographla Anatom,* has  
. beautifully drawn his Character, when he says, that he was *in  
decendo maxime methodicus, in medendo felicissimus, in secando  
expeditissimus.* Most judicious and methodical in his Method  
**os** Teaching, most successful in his Practice, and most expedi-  
tious in his Dissections. He died in the 73d YearOf his Age,  
In the Year. I563. after having, illustrated Anatomy, and enrich-  
ed it with several things unknown to former Ages. He affirms  
in particular. That the *Musculi Pyramidales vftsc* first disco-  
vered by him ; and he is os Opinion, thet the Bladder is com-  
pressed by them; but this was observed before him by *Galen,*and *facobus Sylvius. ... ...*

. He boasts os hiS being the first who solved the perplexing Diffir  
eulty *os Orib astus,* or rather of *Galen,* concerning the Motion  
of the upper Eye-lid, after the *-Musculus Orbicularis* is cut off;  
for he affirms. That in the Year I553. he discovered the  
Muscle which raises the upper Eye-lids. But *Galen* himself  
solves this Difficulty, at a Time when he was hecome Venera-  
hle for his Age and Experience, that is, when he digested **the***Commentaries de Locis male affectis,* as will evidently appear  
to any one who reads them. Besides, *Auifenna* clearly describes  
this Muscle, *Lib.s.. Sum. 2. de Mus.culis, Cap. ζ.* The-same.  
Muscle is likewise accurately described by- *Rcaldus. Columbus in*Ess Anatomical Works, *Anno*Ἀ559-

' Though he is esteem’d the Discoverer of that seminal Duct,  
which he calis the *Tuba Uteri,* whose Extremity, in which  
there is a large Hole, am lacerated and fringed, as it were, like  
the Edges of Old work'd Linen Cloth; yet *sit is.* excellently  
described by *Herophilus,* and *Rufus Ephesius,* who lived long  
hefore him. ' Jsi. . i , *' A*

*By* the true Neck wf the Womb, he means all that Part from:  
itsinternal Orifice, till it heoinS to inlarge itself, and grow widens  
Put .the Whose of tint Passage into which the Penis enters, is  
by him called *Sinus et PudendarA Mulifoere.su \* .. -* ...-i

His *Observationes Anatomica.* were printed *Fence.* I562. 8Vo.

*Paris.* I562. SYo. *Helmastadii,* I58S. 8Vo. His *Expositio iof  
Librem Galeni de OJsibus* was printed *Venet.* I57O.: His;  
*Lectiones de partibussimilar ibus humant Corporis,* were published  
*Noribergce,* 1575. *Fol.* His *Compendium de Anatome humani  
Corporis* appeared *Patavii,* I585. 8Vo. *Verio:* .157 rεἴ

*Opera Omnia, Vinet.* **I584.** *Pole Francof. stlenQsahel. ..* t  
**’AMBROSIUS PARAEltrs,** *Ambrose Parse.*

~ This Anatomist was a Native of *France,* and acquir'd a great  
Character rather for ins uncommon Success in the Practice of  
Surgery, than for any Figurehemade inAnatomical Learningv -

The Muscles, which *Sylvius* calis *Succenturiati,* are by him  
styled the *Triangulares Pubis,* or the *Aceefscrii. He first described*the *Membrana Musculorum Communis,* or *Common Membrane  
of the Muscles.* His Works, under the Title *us Anatomic uni-  
verselle du Corps' hurnairi,* appear'd at *Paris,* I561. 8Vo. and  
afterward in a *Latin* Version *Pario,* I56I-I582. *Fol. Francos.  
scstFi-sLs/i. FA. r*

**BARTHOLOMAEUS EUSTACH1US.**

This Anatomist was a Native of *Italy,* and a Man of Very  
extensive Learning. His Tables, 'tis to he presumed, have  
made his Character, as an Anatomist, sufficiently known  
where .Learning is countenanced, or eVen heard of. He enrich-  
ed Anatomy with several Discoveries; " for he first discovered  
" the Glands which he upon the Kidneys." .

He finds Fault with *Vifalius* for describing, dissecting and de-  
lineating the Kidney of a Dog instead of that of a Man, with-  
out so much as taking Notice of the Difference. He main-  
tained, that the Duct of the Renal Veins is oblique, and not  
transverse, as it is delineated by *Visulius.* He exhibited, in a  
most beautiful Figure, the *Canaliculi Urinarii,* winch he com-  
pares to Very small Hairs; but which were before described by  
*Nicolaus Masses.* In his *Examination of the Bones,* he says,  
the true Structure of the Visory Nerve was first discovered by  
hiutself; and adds, that when it is immersed in Water, it is  
distended and expanded into a large Membrane, like .a Very  
thin Linen Cloth.

Concerning the third Bone of the internal Ear, called *Stapes,*he has these Words: " I am conscious to myself, that without  
" either Instruction or Information, from any one, I knew  
" that Bone long hesorethey wrote, and that I shewed it to  
" many in *Rame,* and caused it to be engraved on Copper.''

He was the first who gave an accurate Description of the  
*Thoracic Duct,* or the Passage by which the Chyle is conveyed  
to the Heart, which, he says, in Horses, resembles a white  
Vein, and has a semi-circular Mouth,: opening into the internal  
Jugular Vein. . .

. He was the first who observed the. Valve at the Orifice os  
the *Vena Coronalis* in the Heart.

He boasts of having first discovered, and exactly described,  
that Valve, winch is by some called the *Falvula Nobilis,* in the  
*Vena Cava,* near the right Auricle of the Heart, tho' *Tacobuy  
Sylvius* seems to have observed it hefore him. In his Treatise  
*de Renibus,* he makes mention of the Glands of the *Larynx.* His  
*OpufculaAnatomica* were printed *Fenet.* I563. 4to. *Liss Libellus  
deDentibus, Venet.* I563i 4to. His *Epistola Nuncupatoria, Romes*1562. His *Opufcula cum Annotationibus, Venet.* 1574. 4toi  
*Lugd. Batav. tssCgr.* 8 Vo. and his *Tabulae Anatomicce* were  
published by *fo. Maria Lancisi, Roma,* 1714. *Fol.* and after-  
wards *Anastelodam.* I722. *Fol.* then *Romae,* I728. *Fol.*

His Notes upon *Erotian* were published *Fence.* I566. - ’  
**JOHANNES HALL.**

This Author was a Surgeon in *London,* and amongst the first  
who wrote any thing upon Anatomy in *tiae English* Language.  
Having never seen ins Works, we know of nothing *for* which  
he is so: remarkable as the gaudy-and pompous Tine of his  
.Book, which runs thus : *A very faithful and necessary brief  
Work of Anatomy, or Dissection of the Body of Man, comperior  
dioufy stewing the Natures, Forms,- and Offices of every Mem-  
ber, from the Haadeta she Fret, with a commodious Order of  
Notes, lending.- and guiding the young Chirurge oofs Hand front  
all Offence and Error, in right way of perfect 1 and cunning  
Opcraiion, compiled in three Treatises,: mare useful and prositis  
ableAhanany heretofore in the* English *Tongue publijhed.* It was  
printed at *.London,* I565.4to. I ' . - .

**“ VOLCHERUn-CoITER.** i' . . \_

\*. This Author-washern at Grwher^ramin the Year I534i and,  
in. Processos; Time,, acquired a Very great Character, both as a  
Physician, Surgeon, and Anatomist. In his *Introduction io Ana:  
tomy. Cap.. 6.* he -gives, this Advice to such: as are desirous of  
making quick and regular Advances in their AnatomicalStudieS Y  
" If, *fays he,* any one is fond, to learn the Anatomical Aut, let\*  
" him first read.Gaim'S-Books rfe *Usu Partium,* and *de Artator  
" rticis.Administratiinibus:, sta^ ffirti Velsusiurs Fabrica Corpo-a  
" ris humanis*. Let .him; in theinird place, *ttadriFallepius*" and then *Peso lit Exarnen,* and, last of all, *Eustachiusl,* and  
" by. this meanshe will be sure-toacou ire a thoron gin and per-

sect Knowledge of this Art.’' Anatomy is considerably in..;  
debted Io this Author for his Labour, and Industry; for he clear-;  
ly specifies the first. Origin os the Bones, accounts for their  
Growth, and.points out the Difference between thoseof Infants'  
and Adults; sor heisted to prepare Skeletons ofChildren/comi-  
pare their. Bones with-those of Adults, and dernonstrate-theDis-'  
ference between them to his Scholars in. *Bologna* ; where,Tn -his'  
**own** House, hejekhibitedasTabortiVe Foetus as.long; as.a Finger,"  
and furnished -with fall the Parrs, ofa human Body. -He.alfd'  
makes mention, of another, Which- he saw *nt..Boiogrna,* **im the ‘  
House***sAsiDt.Acantius.- - . .. . .... .., . . l* :.i et.. Ἰ -

\* In his *Tractatus de Auditus Instrumento,* he has these Words:  
" Whet *Fallopius* called theTympanum, he chiefly took from  
" the Ears of Brutes, and such Animals as chew the Cud ; for  
se these heve this Pafltioe formed like a certain Species of Sea-  
" shell, or a *Turhisu* Drum ; whereas in Men this Passage is  
" widely different from the Shape of a Drum." . For this Rea-  
son he thinks, that this Passage, or the second Cavity, receives  
Its Denomination of Tympanum rather from its Use than its  
Form. He maintains, that there are two of these Cavities;

-for, says he, immediately hehind the Myringa, by which he  
meant the Tympanum, in the upper and fore Parts, appears a.  
Cavity, which is at first narrow, but afterwards dilating itself,  
IS stretch'd backwards towards the upper Parts, and this Part  
is spongy and fungous, and seems to have a Communication  
with the internal Space of the Processus Mamillaris.

According to him two of the *Ossicula Auditus,* that is, the  
two largest, are full of small Holes, which are sill'd with a  
medullary Substance; but the third contains none, on account  
Of its exceeding Smallness.

He says, that there are two Muscles of the internal Ear  
assigned by some, but he does not describe them.

. To the Muscles belonging to the Face; he adds some others,  
which, thy later Authors, are called the *Museuli Corrugatores,*but, from their principal Office, should rather be styled *ffiCMuse  
culi Superciliorum Depresseres,* which he first discovered, and  
accurately described, but gave them no Name: He adds,  
" You will also observe, under the internal Skin of the Lips,  
" and that of the Root of the Tongue, many fleshy Glands,  
" under which are found Fibres, rifing upwards front their  
" Sides in an oblique Direction; and these to me seem to draw  
" the under Lip inwards.'' His Piece intituled, *de Cartilagi-  
nibus Tabulae,* was printed *Bononia,* I 566. Fol. His *Extenta-  
rum atq, intcrnarurn principalium humani Corporis Tabula,* &e.  
*Norimbcrgae,* 1573s Fol. *Louanii,* I653. Fol. His *Lectiones  
Gabrielis Pallopit de Partibus Similaribus humani Corporis ex  
diversis Exemplaribus, summa cum diligentia collecta,* &c.  
-were printed at *Norirnberg,* I57J. Fol.

**JULIUS CAESAR ARANTIUSs**

This Author was born- at *Bologna,* and was the Scholar of  
*Vesalius,* as also of his Uncle *Bartholornaus Magus,* who taught  
**him** the Elements of Anatomy in the Year Γ548. His Piece  
intituled Di *humano Pastu Opusculum,* was printed *Fenet.* I57I.  
*Basil.* I579. *Svo. Veneti.* 1587. *Ano.* To this Edition he join'd  
a Preface, and a Book of Anatomical Observations, printed  
*Veneto.* I595i. In the first Chapter of the last Edition of this  
Book, he describes the true and genuine Substance of the Ute-  
*rus,* asserting that it is fungous, and bears a Resemblance to a  
Sponge; that it is not single, hut divisible into many Laminae,  
like certain *Fungi,* which grow under Trees ; and that it is per-  
forated with Holes, like a Sponge or a Pumice-stone. In the  
third Chapter he not only accurately describes the Vesseis of the  
Uterus, blit also maintains, that its Arteries are continued to  
the Veins; winch he also takes to he the Case with all the Ar- .  
teries and Veins in the human-Body ; which is the fame as if,  
with later Authors, he had maintain'd. *That the Viins were no  
more than Artcries returning to the Heart.*

The spermatic and hypogastric Arteries, which he Calis the  
descending and ascending Ones, not sonsy unite, and are con-  
tinued together; but the Vessels of the Right Part of the Ute-  
ms.are intermix'd with those of the Left. -------

And, in *Chap.* 4. -he treats largely and accurately of the  
(Coalition of the Vessels in the Heart of a Foetus, " A few  
" Days, *fays he,* after their Birth, there is a Coalition of this  
" - Foramen; tho', eyen in older Subjects, some remaining Marks  
" Of that Agglutination -are always retained."

- He also makes mention of.anotherCoalition in the LiVer;  
that-ofthe*VinaPortis* ariththeFlonarCona, which is now uni-  
versally-called the Ductus Venosus.

-That white and rising Part of the Basis os tho Ventricles of  
the Brain, which is stretch’d forwards; on both Sides, in a longi-  
tudinal Direction to the- Forehead, -he calls the *Pedes Hippo-  
campi. ... ......*

-He says,sthetthe Muscles of theEyo arise frorrithe *Os Ssehe-  
noides,* hard by-the Foramen, thro' which the Optic Nerve  
passes; but that one of the oblique Muscles, or that call’d the  
Musculus Brevis,, arises froia a certain Suture, or Cleft, winch  
divides the Bones of the *Maxilla Superior from* the *Ossa Maliy*

He afferts,lthat the *Museulus-Palpebral Superioris,* destin'd  
for opening the1 Eye, and rising -also from the *Os Sphenoides,***was** known sohim'-imthe Year Γστ48ί ' Λ ‘ \*

He first observed the interior Chink of the.Larynx, accurate-  
ly described it, and appositely enough compared i t .to the. Clefts  
im musicalWindTnstrUmentsf ’ - - .V - s - : .-. ἐν ι .

-- Tho’the does -not- openlyacknowledgcche Circulation ofthe.  
Blood, yet-he-largely specifies all the Arguments that are cal-  
dilated .for destroying the Hypothesis of the Antients, concern-  
ing aTranfudation thro' the Septum or Partition, which divides  
the Ventricles:of'the Heart.--

He first observed, that the Duct of tho Artery of the Splined  
was oblique, and twisted in form os a Snape.

He was the first who asserted, that rhe middle Substance of  
the Urethra, or of the Canas common to the Urine and Sperm,  
was os the same Structure with the Penis Itself, and capable  
both of being distended, and becoming flaccid.

He first rook Notice of an orbicular Mufcle surrounding, on  
all Sides, the Sinus Muliebris ; but this Discovery was owing to  
*facobus Carpus,* who had before described tho whole Neck os  
the Uterus as a muscular Substance.

According to him the Musculi Recti of the Abdomen arise  
with a fleshy Origin from the *Pubes,* when their Coverings, he  
means their Musculi Pyramidales, are.wanting..

He maintains, that the Portion of the Museulus Biceps,  
which, according to *Pefalius,* arises from the Process of the  
Acromion, and is inserted into the Humerus, is the eighth  
Muscle os the Humerus, ’which was afterwards by *Riolanup*Call'd *Coraco-brachiaus.* But it is,'without Reason, by some  
call'd the *Nonus Humeri Placentini,* fince it as in reality the  
Discovery os *Araniius. ... dur*

He likewise discovered the *Indicator,* or the *Indicis extensior  
pioprius,* which had remain'd unobserved before him.

He maintain'd, that the second Muscle of the Fingers, by  
which he means what is now call'd the *Flexor perforans, vrtis*the instrument of bending all the *Internodes,* and not of the  
third Joint only, as his Predecessors had maintain’d. . :

. He assumes to himself the Discovery of the *Mnsoulus Femur  
Circumagens,* which he calls the twelfth. . ...

He likewise observes, that a Portion of the *Musculus Femoris  
primus,* that is, os the Gluteus Maximus, hecomes a membra-  
nous Tendon, which joining with anotherTendon arising from  
the sixth Muscle of the Tibia, or the *Faseialis,* is strongly and  
laterally inserted into the Appendix Tibiae.

By means of this Communion, or Conjunction, he accounts  
for the Pains of the Hips reaching to the Very Knee.

In *liis Observat. Anatom. Chap.* 36. he has these Words eon-  
cerhing the Substance of the Testicles: " Perfect Seed is car-  
" tied, as it were, from numberless small Roots of a Plant,  
" Varioufly dispersed thro' the Substance of the Testicles, winch  
." Roots appear wrapp'd up and curl'd like theTendrils os Vines,  
" and resemble white curl'd Hain."

**-CONSTANTIUS VAROLIUs,**

This Author was a Native of *Bologna,* an accurate Philostr-  
pher, an/expert Surgeon, and a skilful Anatomist.

He is said to be the first who discover'd the Valve of the  
Colon, and elegantly described it in the following Words:  
" Where the Ilium is joined to the Colon, there rises in its  
" inner Part a certain Membrane, being the last Boundary of  
" the Ilium, which reaches so far, and which I, its first Dis-  
" jeoverer, call the *Operculum IliiP* And a little after he  
makes mention of the " Appendix of the Colon, as heing an  
" oblong Sack, imperforated at one of its Extremities, which  
or is call’d the *Intestinum CarcumlP . .*

He first divided the Brain into three Paris, by adding the  
Beginning of the Spinal Marrow, whilst yet contain'd within  
the Scull, and giving Birth, as it were, to the Nerves, whose  
Origin was sonnerly thought to be the Brain.

, The Optic Nerve, according to him, arises from the posterior  
Part of the Spinal Marrow, and not from the Base of the Brain  
in its fore Part, as *Galen* and others maintained.

The transverse Process of the Brain is call'd the *Pons Parolii,*from *Farolius,* its first Discoverer.

He first discovered the Glands in the *Plexus Choroeides,*

His *Anaiomia, sine de Resolutione Corporis humani. Libri  
^ualuor, etc.* was printed *Patavii* I573. 8νσ. *Francos..* I5911  
8w. . -

**JULIUS JASSOLINUS.**

This Anatomist was the Scholar of *Philip Ingrasifias,* and  
afterwards succeeded him in the University of *Naples,* in the  
Tear I57O. Dr. *Douglas* calls him, *Seculi Epidaurius fati*Put *Eiolanus,* who was no bad Judge of art Anatomist's  
Worth, talks of him in this diminutive Strain : " As the Pre-  
" fence of some Men lessens their Fame, so the reading Books  
*po that* have heen earnestly desired and sought after; sometimes  
*" makes* their Authors appear mean and contemptible. "

He has something pretty remarkable concerning the Gene-  
ration of the Bile ; for he maintains; that the bilious Excre-  
ment is evacuated from the Liver, in two different Portions ;  
the one is unmix'd, thin, and. unadulterated, and is carry'd.  
into *rue Vesicula* dtfelf, by the small 'Vessels hetween the Roots  
of the Vena Portae'and the Vena Cava; which the Gall-bladder  
afterwards discharges into the Beginning, of the Intestine. An-  
other Portion of it -is mixed, thick, and seeulent, which is  
carry'd directly from the Liver, into the Intestine.. To this he  
haSTubjoin'd a new Figure of the Gailthladder and its Vessels,  
His *Ndurostiones Anatomical,* and *Osteologia Parva,* were printed  
*Neapoli,* I57 3. *Oct. Hancuria,* I654. *Quarto.* His Piece

*~De Peris Chclidecis, et Vesica Fellea,* was painted *Naapoli,  
s57I‘ Octavo. - -*

**JOANNES BAPTISTA CARcANUs LEONIS.**

This Anatomist was a Native of *Milan,* and the Scholar of  
*Fallopius.* He maintain’d, that there was no Membrane in  
the *Canalis Arteriosus,* which shuts up its Orifice, as *Vesalius*imagined-

The Foramen near the Orifice of the *Vena Coronalis,* thro’  
which the Blood flows from the *Vena Cava* to the *Arteria Ve-  
nalis,* appears to be of an oval Figure. Hence we may conclude,  
that it first acquired the Name of *Foramen Ovale* from this De-  
fcrrption.

He asserts that the *Vena fine Pori* has no Membranes or  
Valves on its Orifice, which contradicts what *Amatus Lujitanus*relates, who in his first Century of Cutes affirms, that he saw  
these Membranes exhibited at *Ferrara,* by *Johannes Baptista  
Concrnus.*

He finds Fault with *Columbus* sot asserting, that the Penis  
has neither Veins nor Nerves ; for he not only specifies the  
Veins of its principal Substance, but also others which creep  
along its Surface, and which he calls cutaneous ., all which ta-  
ken together, a certain Modern of great Note call’d the *Vena  
ipstus Penis,* or, the Vein of the Penis itfeif.

He asserts, that the Musculus Orbicularis of the Eye-lids  
cannot he separated into two, as *Vesalius* thought. Hrs two  
Books of Anatomy were painted *Ticini,* I 574. *Oct.*

**FELIX PLATERUs,**

This Author was hern at *Basel,* in *Switzerland,* in the Year  
S536. He had from bis Infancy a Desire to view the Entrails  
of Beasts when they were stain, and even then pronounced the  
Butcher happy, for his heing able at first View to handle them  
over and over, without committing a Mistake. His *Libri Tres  
de Corporis humani S.ructura et Ufu, etc.* were printed *Basel,*I583. *Fol.* I603. *Pel.* His *Quast. Phystologicae, Lugde Bat.*S650. His Piece *De' Mulierum Partibus Generationi di-  
catis, etc. Argentina.*

**SALOMON ALBERTUs.**

This Author was Professor of Physic at *Wortemberg,* and  
published **a** Book, intituled *Historia plerarumq., Corporis humani  
Partium, in Usam Tyronum, VVittehergae,* I 583.0#. I602. *Oct.*I630. *Oct.* The Discovery of the Valve of the Colon, com-  
monly called the *Valvula Bauhini,* is justly ascribed to him .  
*for* he affirms, thet he first discover’d it in a Beaver, and then  
in a Man.

His three Orations *de Disciplina Anatomica -were* printed  
*Istiremherga,* I 585. *Octave ,* and his *Observationes Anatomicae,  
JVitteberga,* I 620. *Oct.*

**ARCHANGFLUS PrCcOLHOMINUS.**

This Author was a Native of *Ferrara,* and a Citizen os  
*Feme i* He was hern in the Year 1526. but in *Rialanurs* Opo  
tried, the was rather a Philosopher, than an Anatomist, since  
his Anatomical Prelections are interspersed with Physiological  
Disquisitions, and aine-spun Controversies, quite foreign to  
Anatomy. But that he labour’d with Success in this Branch  
of Learning, is sufficiently evident from the improvements and  
Discoveries he has made in Anatomy ; for

He was the first who divided the Substance of the Bmin into  
*cineritious and medullary*; for he calls that concretions or whitish  
livid Bndy, which first appears, the Brain itself; but he calis  
that solid white Bndy which is wrapt up in it, the *Medulla,*or Marrow, which he distinguishes into three Kinds, the Mo-  
*dulla glebosa, rue Medulla oblongata caudicis instar,* and the  
*Medulla spinalis.*

He maintains, that all the Nerves heve their Origins from  
the *Medulla oblongata.*

He was the first who called the *Procestsas Mamillares, Nervi  
oderatorii,* or, the Nerves by which the Sensation of Smelling  
is produced. ’ ‘

He first discovered thet wonderful Contrivance of Nature  
at the Beginning of the *intestinum caecum,* that is; three Valves  
like little Doors opening downwards : And asserted, that they ‘  
were design’d to prevent the Return of the Feeces. ..

He:first delineated the Anastomosis of the Vena Porta and  
the Vena Cava within the Liver, after it had been desorihed by  
*Jacobus Carpus. ' .*

He aserihed Prostata» to Women, as *Galen* had done be-  
. fore him. - ‘ .

He was also the first who described the particular Membrane  
of the Fat, which *Riolanus* afterwards called the *Aiembrana  
Adipefa.. . '*

He asserts, that-the Peritoneum is every-where double, and  
consists of two Coats.

He first took notice of, and deserihed, thet white Line of  
the Abdomen, which is now called the *Einea alba.*

In his Opinion thcre was only one continued Duft which  
reach’d from the Mouth to the Anus. -

He affirms thet the internal Coat of the Intestines is three  
times as long as rhe external Coat, and thet it is corrugated,  
and form’d into Wrinkles, that the Chyle, by that means,  
.remaining longer in them, might he the more cornmodiousty  
extracted by the mesenteric Veins.

He describes the membranous Canals, or the Tubes with a  
fleshy Covering, thro’ which the Urine is strained, better than  
*Carpus* or *Masses.*

The Reafon he assigns, why the left spermatic Vein does  
not arife from the emulgent, is precisely the fame which is em-  
braced by the Moderns.

He colls the *Hymen, Claustrum Virginitatis.*

1. He assigns Names to all the Mufclcs, from the Uses and  
End, for whicti Nature design’d them ; thus he named **the***Musculi Ocularii,* or *Viserii ; Masticatorii.; Licutorii ; Re-  
spiratorii Arnplexatorii , Scapularii ., Hamerarii; Cubitorii;  
ApprehenserU, ‘* or *Aelanuurn Moventes ;* and *Ambulatorii, or  
Progresiscrii*; the *Femorales,* and *Tibiales, etc.*

He call’d the frontal Muscles *Museuli Paihernatium,* or *Muse  
culi Acirni affectuum stgulstcocivi.* His *Anatomicae Praelectiones*were printed *Rama, 1586. Folia* ; and his *Commentarii in Li-  
brum Galeni de Hamoribus, Parise* I 556. *Oct.*

**CAsPARUS BAUHINUS.**

This Author was bom at *Basel,* in the Year I56O ; and was  
universillly esteem’d to be a skilful Anatotnist, and a curious Bo-  
tanist But *Riolanus* talks of him as ignorant, injudicious, and  
sprefumptuous. He says, that, in the Year I 579. he observed -  
the Valve in the Beginning of the strum, or Colon, before he  
read any Author who made mention of it : But ’tis certain,  
that *Varolius,* and a great many others, describ’d it very accu-  
ratesy many Years before. , '

He took notice of the natural Narrowness of the Intestinum  
Colon in the Right Side ; and for this Reason Colic Pains not  
only arise most frequently, but rack most violently, in thatPart;  
for that narrow Passage is easily ohstructsd, by the Excrements,  
which are long retained there, and indurated. , His Piece, in-  
titled *De Partibus humani Corporis externis Liber,* was printed  
*Basel.* I 588. His *Andtornes Liber secundus,, ibid.* 1591. *Oct.*His *Anatomica Corporis Virilis et Modiebris Historia, Lugde  
Bxt.scryy. Oct.* I609. *Oct.* His-dur *Corpores humani Fa-  
brica, Lib.* 4. *etc. Bastl.* I6OO. *Oct.* His *TheatrumAnato-  
micum, Francof.* 1605. Orf. *Francof.* I62r. *Quarto.* His  
*'Institutiones Anatomicae, etc. Basel.* 1604. I609. *Oct. -* I 640.  
*Quarto. Francof.* I6I6. *Oct. Oppenhem'ci,* I6I4, *Octavo.*Y629. *Oct.* His *Epistola Anatomica Curiofa,- Lipsta et Franc.*S673. *Quarto.*

**- JOHANNES PoSTHIUS.**

This Anatomist was hern in the Year I537, in *Germerseeim,.  
a.* Town of the Lower Palatinate upon the *Rhine,* and died in  
the 6cth Year of his Age, in the Year I 597. He teems to  
be very dextrous at dissecting the Muscles, which is sufficiently  
proved by forne Discoveries he has made.

He maintains, that there are four Museles which 'draw the  
Lips inwards to the Teeth ; two. in the inferior,, and two in  
the' internal Part.

He ascribes six Muscles to the Penis, and affirms, thet there  
is only one Mufcle between the Cartilages of the Ribs, and not  
two, as in the intercostal Spaces.

He' says, that the fourth Mufcie of the *Maxilla inferior* does  
not arife from the Styloid, bin from the Mamillary Process.  
He was,also rhe first who asserted, that the tendinous Part of  
this Mufcle adhered to the *Os hyoides.* He also asserts, that  
the Processus Mamillares are not the Organs of Smell. He  
advises to dissedi the Muscles, as much as possible, in fuch a  
manner as to preserve their Origins and Insertions entire; be-  
cause by this means then Uses may he most cornmodiousty diseo  
vexed. His *Observationes Anatomica* were printed *Frapiof*I590. I593. *Octavo. His Mantissea Auatomica. vt^.psmieA  
'Hafniae,* X66I. *Oct.* ,... ἀ mid./.

--..s-.ei u: **VIDUS VIDIUsz -**

This Author was hem at *Florence,* but was Proseflor of Phy-  
sic and Surgery at *Paris,* and Physician to *Francis* I. He  
died in I567. . , 'mi; .in :

He vias remarkable for bring extremely, well vers’d in the  
Writings *αίHippocrates. - .* **.T..-T.**

His *Ars.Medicinalis* was printed *Venet.* **I6rI.** ;3TeZ. *Fols*

The third Volume contains seven Books, on the-SubjedI of '  
Anatomy, illustrated with twenty-eight Copper plates.

**ANDREAS CASALpINUS.' ' - ‘ .**

This Author whs hem *at Acetos in Italy,* and was a strong  
Champion for the Peripatetic Doctsine, in Opposition to *Ga-  
len,* who was at that Time reverenc’d as an Grade. Hence  
it was, that the Writings of *Caesalpirsus,* the’ very valuable in  
themselves, were neglectsd ; and those Passages which he ca-  
fually wrote, concerning the Circulation of the Blood, either  
not adverted to, or not understood, by any, till *Harvey,* **the**

Glory of hrs Country, published his incomparable Book upon  
thet Subjeci. ( . . : .

*Caefalpinus* affirms, with *Aristotle,* that the Heart is riot only  
the Source and Origin of the Arteries and Veins, but also of  
-theNerves. .

In Quest. 4. where he proves, thet in Respiration no exter-  
nal Air can have Access to the Heart, he has there Words :  
\_ " For the Membranes are fo fitted and adapted to the Mouths  
’ r\* of the Vesseis, that when the Heart is dilated, they are  
" opened; but when it is contracted, they are shut.” Here he  
also dearly and fully explains the Contrastion and Dilatation of  
the Heart.

“ Some of the Vessels,” continues he, which terminate  
“ in the Heart, fend their Contents into it, such as the *Vena*

*Cava* into the Right Ventricle, and the Venous Artery into  
" the Left. Some of them, on the other hand, draw their  
" Contents from it, as the Arteria Aorta from the Left Ven-  
“ triole,- and the Arterious Vein from the Right ; but they .all  
" have Membranes so fitted and adapted to them, that the  
" Mouths of the intromitting Vesseis will not admit of a Re-  
μ turn, .and the eliminating Vesseis will not admit of an Intro-  
" mission. It happens, thet when the Heart is contracting, the  
" Arteries are dilated ; and when it is dilatiog itself, they are  
\*' contrasted; for when the Heart is dilating, it shuts the  
Orifices of the eliminating Vessels, so that nothing-can at that  
Tirne flow from.the Heart into the Arteries ; and when it is  
contraSing, its Contents must flow into the Vessels, because  
the Membranes are then, opened.

He maintains, that the. Puliation of the Heart and Arteries  
proceeds from an Effervescence of Humours in the Heart; and-  
he treats largely of the Pulle. . . .

Soon after, he has these Words; " The Lungs, therefore,  
" drawing the hot Blood from the Right Ventricle of the  
"‘ Heart by a Vein resembling an Artery, and by *Anastsmests*μ returning it to the Venous Artery, which goes to the Left  
"' Ventricle of the IIeart, the fresh Air is in the mean time  
" transmitted thro’ the Canals of the *Aspera Arterias3 Real-  
dusColtnnbus* had advanced the fame before him.

" Theseveral Phaenomena, appearing upon the Dissection of a  
" Subject, correspond excellently with this Circulation of the  
“ Bleed, from the Right Ventricle of the Heart, thro’ the  
“ Lungs, to the Left Ventricle.”

And a little after be with a great deal of Learning proves,  
That the Antients had no mander of Reason for giving the  
Names of *Arteria Vena fat,* and *Vena Arieriofa,* to the Vessels  
which bear thefe Names, since, in his Opinion, one of them  
was an Artery, and the other a Vein. . .

In his fifth Question, where he shews, thet the Heat of the  
Heart is the Principle of Motion in Respiration, he has there  
Words i The fame hot Blood, which, by diluting the Heart,  
“ causes the Pulse, is also, by dilating the Lungs, the Cause  
"" of Respiration.” The Lungs then being inlarged, the ex-  
ternal Ain must necessarily rush into the *Aspera Arteria,* which  
Inspiration is, for that very Reason, call’d Refrigeration ; and  
a Diminution of Bulk happens just as in boiling Liquors, when  
cold ones are pour’d into .them ; but when the Lungs collapse,  
the Air must necessarily be returned, which is called Expi-  
ration-

In Question the sixth, he endeavours to prove, thet no Part,  
in which there is not Blood, can he capable of Senfation. But  
tho’ in his Opinion there can be no Sensation without a Nerve,  
yet it is not the Nerve that feels, but the Flesh,. or Part in  
which the Blood is contained.

“ The Contrivance of Nature,” fays he, " in animal  
" Motion, resembles that of Organs, which; by means of ths  
" Air communicated to the Pipes, and by touching sometimes  
"" one, and sometimes another Key, produce the various Com-  
" binations of Sounds intended by the Organist.”

In, Question the seventeenth of his second Book, he fays,  
that Suffocation in a Quinsey is rather produced by the Reple-  
tion of the Jugular Veins, than the shutting up the Mouth of  
the Larynx; for when the Veins of the Neck are so obstniited;  
that the Blood and Spirits cannot ascend, they must necessarily  
regurgitate to' the Heart and Lungs; and the Lungs being  
. fill’d, and becoming replete hy this means, cannot contracti and  
dilate themselves.

in Page 234. he has these Words : "The Veins become  
" turgid beyond the Ligature,. and not betwixt it and the  
" Heart ; but it ought to have been otherwise, if the Motion  
"of the Blood and Spirits had been from the Viscera to the  
" revera! Parts of the Body ; for the Passage being obstructed,  
" the progressive Motion of the Blond is stopt, so that the  
," Veins should heve become turgid betwixt the Ligature and  
’ " the Heart.” Let us fee whether this Difficulty is solved by  
what *Aristotle* has said, *Lib. de Somno, Cap.* 3. where he has  
i these Words: " For that which is evaporated must necessarily  
" be impcssd to some Part, and then transform’d and chang’d  
" in the fame manner with that Arm of the Sea called *Eieri-  
. “ pus*; for thet which is warm in every Α nainal, has a Ten-

dency to sty upwards : Rut when much of it is lodg’d at one  
i\* and the same time in the upper Parts, it then returns, and is  
“ carried downwards.” Thus far *Aristotle. ... .... , .-*

. " For the understanding of which Passage we must know,  
" thet the Passages of the Heart are so contrived by Nature,  
" that there is an Entry from the Vena Cava to the Right  
" Ventricle of the Heart, from which there is a Passage into  
" the Lungs ; and that from the Lungs there is another Pas-  
" rage into the Left Ventricle of the Heart, from which at last  
" there is a Passage into the Arteria Aorta, certain Membranes  
" being fitted to the Mouths of the Vesseis to hinder the Return  
“ of the Fluids; for thus there is a perpetual Motion from the  
" Vena Cava, thro’ the Heart and Lungs, into the Arteria  
" Aorta. ... , \_

" When we are awake, the Motion of the *natural Heat ise*" towards the Surface of the Body, which is the immediate  
“ Instrument of *Senfations* and since, during Sleep, it is to-

wards the Heart, we may suppose, that, in a waking State,  
" many Spirits, and much Blood, are convey’d into the Arre-

ties, and from thence carried into the Nerves ; but that in  
Sleep this, same Warmth returns to the Heart thio’ the  
" Veins, and not thro’ the Arteries; for there is a natural  
" Passage to the Heart thro’ the *Vena Cava,* but not thro’ the  
" Artery. Α Confirmation of this may be had from the Pusses  
" of the Arteries, which, in waking People, are high, vehe-  
" ment, quick, frequent, and in some Degree vibratory. But  
"" inSleep they are low, languid, flow, and loitering; for, during  
“ Sleep, very little of the natural Heat goes into the Arteries,  
" hut it rushes into them with greater Violence when we  
"" awake; but ’tis quite otherwise with the Veins, which,  
" during Sleep, become turgid, but lessen and become smaller  
“ when we are awake, as wish appear by taking a View of  
"" those in the Hand,, in thesotwo different States.

. μ For the native Heat, during Sleep, passes from the Arte-  
Iles into the Veins, by a Communication of Orifices, called  
*"" Anastomoses,* and from thence to the Heart. But as the  
μ Flux of the Blood towards the upper Parts, and its Reflux

to the lower, after the manner of *Euripus,* is manifest both  
"" during a State of Sleeping, and Watching ., so the Motion of  
“ it in any Part of the Body is very sensible, when a Ligature  
" is apply id, or the Veins are obstructed any other way. For  
"" when the Passage is intercepted, those Rivulets swell at the  
" very Part where they were ufed to stow easily; perhaps the  
"" Blood, on such an Occasion, returns to its Source, lest ini

Motion heing intercepted, it should be quite destroy’d.” \_

Tho’ *Caefalpinus* writes, as one would think, very explicitly"  
upon this Matter; yet we will not take upon us to determine  
positively, that he knew this Affair distinctiy. We rather  
think, with MI. *Worton,dur* That this Notion bad only been  
" occasionally and stightly treated of by *Columbus and Gasetso  
"" pinus,* who themselves, in all Probability, did not know the  
"" Consequences of whet they asserted, and therefore it was  
" never applied to other Purposes, either to shew the Uses of.  
"" the other Viscera, or to explain the Nature of Diseases.  
"" Neither; for any thing that appears at this Day, had they  
\*" made such Numbers inf Experiments, as whre necessary to  
"" explain their Doctiine, and to ciear it from Oppositioni  
ci All this Doctor *Harvey* undertook to, do, and with indefa-  
" tigable Pains traced the visible Veins and Arteries throughout  
"' the Body,' intheinwhole *Progress from and to* the Hearts so

as to demonstrate even to the most Incredulous^ not only  
"" that the Blond circulates thro’ the Lungs and Heart, but the  
\*" very Manner how, and the Time in which, that great Work

is performed.” . . ... 4 - Ψ

*Piis, Qpeastisnum perspareticorurn libri Quaiuor, Damostum In..*

*vesugatis peripatetica. Quaestionum Medicarum Libri Duo, et  
de Medicamentorum Facultatibus,* were printed *Venetiis* I593.  
4ro. . . \_

This Author dy’d at *Rame* int6O3.

**HIERONYMUS FABRICIUS AB AoUAPENnEilTs,**

So called from a Town in *Tuscany,* where he was hern., He  
was Pupil to *Gabriel Fallopius,* then Professor of Anatoiny ar  
*Padua,* whom he succeeded in that Province, in the Year  
I565. and contioued in it upwards of fifty Years. .He dy’d in  
I6I9. at *Padua: \_ ,*

In 'I574. be first observ'd the Valves of the Veins; -of which,  
it is said; he was inform’d by Father *Paul*but he was not  
acquainted with their true Strueiure, nor their Uses;

He discovered a small Mofcle in the internal Ear, which he.  
appropriates to the Malleus.

He affirms, that the Cuticle consists of two Laminar.

He was also the first who look’d upon the carnous Coat of  
the Bladder, as a Muscle concern’d in the Expulsion of the  
Urine. ... .

Besides these Particulars, he has many others which deserve  
Attention: And; upon the Whole, he was an accurate Ana-.  
tomist, and admirable Surgeon.

His Works are. *De Visione, Voce, et Auditu, Venet.* I6O0.  
*Fol. Tractatus de Oculo Visus Organo, Patavii,* I603. *Fol.  
Francos.* I605. I6I3. *Fol.- De Venarum ostiolis, Patau.*

I6O3. *Fol. De Locutione et ejus Instrumentis, ibid.* 1603.  
*Fol. De Musculi Artificio, et Ojsium Articulationibus, Vicentia,*I 614- 4to. *De Respiratione et ejus Instrumentis, Patavii,*I6I5. *eso.. De Motu locali Animalium, Patau.* I6I 8. 4to.  
*-De Gula, Ventriculo, Intestinis Tractatus, Patavii,* I6I8. *eso.  
Opera Anatomica, Francos.* 1623. *Patau.* I625. *Opcra omnia  
Physiologica et Anatomica, Lipsia,* 1687. *F°l. Opcra Anato~  
mica cum Praefatione Albini Lugduni, Batau.* I738. *Fol.*

**JULIUS CASSERIUS**

Was born at *Placentia in Italy,* in I545. He was first Ser-  
vant, and afterwards Pupil, to *Pabrioiui ab Aquapendente*; and  
by dint of Parts and Industry made Very great Progress in Ana-  
tomy, insomuch that, in the Opinion of Dr. *Douglas,* he was  
a hetter Dissector than his Master, tho' not so .good a Philoso-  
pher. He dyed in 1605. in the sixtieth Year of his Age.

His Works relate principally to the Organs of Voice, and os  
the Senses, and are illustrated with excellent Figures. Their  
Titles and Editions are as-follows : *Historia Anatomica de Vocis  
AUditUs.que Organis, Ferraria,* I6OO. *r enet iis, IssCrJ. Fol. Pen-  
tastheseion, sienet.* I6O9. *Francos.* I6O9. I6IO. I622. *Fol.  
Tabula Anatomica,* with what was waning, fupply'd by *Daniel  
Bucrceius, Venet. ssppri. Francofurt.* I 632. *Ato. Anast clod.* I645.  
*Tabulae de formato Ecetu, Amstelod.* I645.

**JOHANNES PHILIPPUS INGRA5S1AS,**

- A *Sicilian* by Birth, and Professor at *Naples,* flourish’d  
about the Year I546.

He claims the Discovery of the Stapes, a small Bone *os* the  
internal Ear; and jo the first who describes the true Structure  
os the Os Cribrosum. .

His only Anatomical Work is his *Commentaria in Galeni  
Librum de Ofsibus,* printed *Panor.* I 603. *FoL Venet.* 1604s  
*Fol. . -*

**ANDREAS LARENTIUS**

- Was Professor of Physic, and Chancellor of the University  
of *Montpelicr,* and Physician to *Henry* the Fourth of *France.*He dy'd in 1619. His Anatomical Works are more remark-  
able sor Elegance of Style, than Correctness, with respect to  
thefiubject; for he is said to have made a great many Mistakes,  
and to have laid Claim to many important Discoveries, which  
-were however .known to preceding Authors. His Errors are  
said by *Riolanus* to be owing to his trusting to the Reports of  
others, without examining the Parts himself. His Anatomical  
Works and Figures are, notwithstanding, in Very good Repute,  
and are esteemed very useful.

His Works are *Histor. Anatom, humani Corporis, See.* printed  
*Paris.* I60O. *Fol. Francos.* I6oo. *FoL—*I6O2. *Svo.* I616. *Svo.*---I62I. *Svo. Opera omnia Anatomica et Medica, Francos.*I 627. *Fol. in French, a Paris, i6su. Fol. . Opcra Anatomica,*&c. *Hanovlae, i6oi. 8uo.*

***LUDOvlCUS* SEPTAL1US**

Was born at *Milan* in. I55O. and dy'd at the fame Place in  
I63O. He describes the Structure of the Cartilago Ensiformis,  
in his Book *de Morbis ex Mucronata Cartilagine evenientibus,  
Mediolani,* I632. 8Vo.

He also publish'd a Book *de Navis,* printed *Mediclani,* I 606.  
*Patauii,* 1628. *Svo. Argent.* I629. *8uo. Patavii,* I65I.

**PETRUS PAAw.**

This Anatomist was born at *Amstcrdam,* in I564. As he  
had the Advantage of attending the Lectures of *Bontius, Heur-  
nius,* and *Rembert Dodoncus* at *Leyden,* of *Duretus,* and *fob.  
Faber,* at *Paris , and of* seeing the Dissections of *Fabricius ab  
Aquapendente* ar *Padua,* by this, and his own Industry, he ac-  
quired great Knowledge and Reputation in his Profession, inso-  
much that in 1589. he was made Professor os Physic at *Leyden.*

His Works are, *Primitia Anatomica de humani Corporis  
Ofsibus, Lugd. Batav.* I6I5. 4to. *Amstelod.* I633. 4to. *Notes  
et Commentarii in Epit omen Andrea Ves.alii, Amstelod.* 1616.  
*ibid.* I633. 4to. *Succenturiatus Anatomicus, See. Lugd. Batau.*I6I6.. *DeValvtda Intestini Epistola Dues* are extant in the  
first Century *of Fabricius Hildanus,* printed *Oppenhem.* 1619.  
His *Anatomic# Observationes Selectiores,* published by *Thomas  
Bartholine,* are in the third and fourth Centuries os his Hist.  
*Anatom, et Mede rar.*

**BARTH0LOMAEUS CABROLIUa**

‘ Was of *Aestestain.* He was Professor os Anatomy at *Mont-  
pelier.,* about I570.

His Anatomical Works are. *Alphabet™ Anatomicon,* printed  
*Geneva,* I 60.4. 4to. and in *French,* I 62.4. 4to, and che *Qctle. -*

*gium Anatomicum Clarisse trium Viror, Jujsiolini, Setserini, Cot-  
brolii. Francos.* I668. 4to. . ss

**GEORGIUS HORSTIUs**

Was thorn in I 57 5. and in I 606. was made Professor at  
*Wirternberg.* He dy'd in I636. at *Ulm.*

His Anatomical Works are. *Scepsis de Naturali Conferva-,  
iione et Cruentatione Cadavcrurn, Wittebergce,* I607.8Vo. *Libri  
Duo de Natura humana, Witt eb or gee,* 16o7. 8 Vo. *Francoism*I6I2. 4to. *Ulrnee,* I628.4to. *Nortinbergce,* I652. 4to. His  
*Anatome Corporis humani. Crest a,* I 617. *Fol. Exercetat. de  
Natura motus Animalis, Gijsie,* I6I7.

**CASPAR HOFFMAN**

Was born at *Saxe Gotha,* in I572. and practised Physic at  
*NorimbergiXtd. Altorfsi,* about theYear I6co. He died in 1648.

He wrote the sallowing Anatomical Treatises : *De Usu  
Lienis Secundum Aristotelem Liber singularis c De Usu Cerebri  
secundum Aristotelem Diatriba, Lipsia,* I619. SVo. *Com-  
mentarii in Galen, de Usu Partium, Lib. ly. Francos.*.I 625. *FoL  
De Thorace ejus.que Partibus Commentarius, Francos.* I 627.  
*Fol. De Generatione Hominis, Francos.* 1629. *Fol. Nota  
perpetuae in Galen .. de Ossebus Librum, ibid.* I63o. *Institutiones  
Medicae, Lugd.* 1645. *De Partibus Similaribus Lib. singula-  
ris, Francofurt, grifer.* 4to. *Pro Feritate, Tract.* 3. *Lutetia,*so47\* - .....

**JOHANNES RIOLANUS**

Was horn at *Paris,* in the Year 1577. where he was after-  
wards Royal Professor of Anatomy and Botany, and fust Phy-  
sician to *Mary* of *Medicis,* Mother to *Lewis* the XIIIth. He  
was an exceeding dexterous Anatomist, and elegant Writer ;  
he enriched Anatomy with many useful Discoveries, and appears  
well versed in the Writings of the Antients.

Amongst other Discoveries, he first took Notice of the Ap-  
pendiculae Pingues of the Colon, gave Names to the Hepatic  
and Cystic Ducts of the Liver ; and observed, that the Ductus  
Communis was not furnished with a Valve, but instead of that,  
with a kind of Rugosity, which in some Degree supplies the  
Place of one.

With respect to the Hymen, he thinks it is a circular Mem-  
brane, placed across the Vagina, with a small Foramen in the  
Middle; and that by the Laceration of this, the Carunculae  
Myrtisormes are form'd.

He allows of the Anastomoses of the Epigastric and Mam-  
maty Arteries in Women, but not in Men.

He has also some Observations, which are new, concerning  
the Canal of the Cervix Uteri, the Os Hyoides, Tongue, and  
a Ligament, winch is extended from the Styloide Apophysis, to  
the Angle of the lower Jaw. .. .

His Works are *Schola Anatomica, Sec. Paris.* I 607. δνο.  
1609. *Genev.* I624. Svo. *Anatome Corporis hurnani, See.  
Paces.* I6IO. *Fol. Osteologia,* &c. *Parise* I6I4. Svo. *An-  
thropographia, Paris.* 1618. Svo. *ibid.* I626. 4to. His *Opera  
Anatomica ,Luteticae Paris. sfag.Fol. Opuscula Anatomica, Paris.*I652. I2mo. *Enchiridion Anatomicum, See. Lugdun. Batav.*I649. *Paris.* I658. 8Vo. *feaae et Lipsiee,* I674. 8Vo.  
*Lugdun. Batau.* I 675. 8yo. *Francos.* I 677. *Svo.* and in  
*French, a Lyon.* I 682. 8Vo. \*

**ANDREAs LisAviUs.**

This Author was Professor os Poetry and History at *Jena,*in I588. and in I 605 Director of the University of *Coburg.*He died in I6I6.

His Character is founded on his Chemical Works; but he  
was the first who described the Method of transfusing the Blood -  
from one Animal to another. See **the** Article **CHYMIA.**

**. . AEMILIUS PARISANUS.**

This Author treats on many Anatomical Subjects; but, as it  
is said, with a great deal of Ignorance and Insolence. *Riola-  
nus* speaking of this Author, has the following remarkable Pas-  
sage : *Cacata hac Charta annalium Volusianorum face dignissima,  
qua Parifani Fatuitatem declarat, deferatur in Vicum venden-  
tem Thus, et Odores, et Piper, et quicquid Chartis amicetur in- .  
eptis.* His Works are, *'Nobilium Exercitationum Lib. duodecim,*printed *Vinetc* 1623. *Fol. Par et Sanius Judicium de Seminis  
a toto Proventu,* &c. *Feriet.* I633. *Altera Pars Nobilium Excr-  
citationum, Venet.* I635. *Pol. Nobilium Exercitationis Pars  
tertia, Venet.* I638. *Fol.*

**MELCHloR SERIZIUSs**

This Author was hern at *Strasturg,* in I578. and is re-  
markable sor having studied at twenty-seven Universities. He  
was Professor at *Strasturg.*

His Works are interspersed with many Anatomical Differta-  
tions ; they are. *Exercitationes Medica, See. Argentorat.* I62.4..  
I63I. I636. 4to. I674.4to. *Hiessertaiiones tres de Ras.piratiora,  
Argentorat.* I642. 4to. *Dis.put.* 4. *de Dentibus, ibid.* I645. 4to. .  
*Di/putai. de Concoctione, ibide* 1642. 4ro. *Disputat, de Fa..*

*atiltatilrus Naturalibus, ibid.* I644. 4to. *Disputat, de Sudore,  
ibid, tfaiy.* 4to. *Disputat, de Fame et Site, ibid.* I655. 4to.  
*Disputat, de Pilis dues, ibid.* I651. 4to. *Prodromi Examinis  
Vulnerum singularum humani Corporis Partium partes quatitor,  
Argentorat.* I632. 4to.

**ADRIANUS SPIGELIUS.**

.This Physician was hern at *Brussels,* in 1578. He was a  
celebrated Anatomist, Knight of *St. Mark,* and first Prosefibr  
of Anatomy and Surgery at *Padua.* His Works are. *De for-  
mato Fartu Libersingularis, Patav.* I626. *Fol. Francos.* I63I.  
4to. *De humani Corporis Forma Lib. decern, See. Venet. prize].*I 654. *Fol. Francos..* 1632. 4to. *De incerto Tempore Partus  
Epistola,* I664. *Opera omnia quee extant, Amstelodarn.* I645.  
*FA. - ..*

**ALEXANDER MAssARIAs;**

' This Physician was born at *Vicensca,* and in I 587 was Pro.  
fessor of Physic at *Padua,* he died in I 59 8.

He is remarkable for the extravagant Compliment which he  
paid to the Memory of *Galen,* which was, that *he had rather  
err with* Galen, *than be in the right with the Moderns.*

His *Tractatus de Urinis et Pulsibus,* was published *Frances..*1608. *Opcra Medica, Lugdun.* I634.

**MATTHIAS LUDovICUS GLAND0RP.**

This Author was a Pupil to *Spigelius,* and a celebrated Sur-  
geon of *Bremen.* His Works contain many Anatomical Ob-  
shrvations, some of which are illustrated with Figures.\* His  
Works are. *Speculam Chirurgorum, Bremee,* I619. I2mo..  
*Tractatus de Polypo Narium, Brema,* I628. 4to. *Gasoophy-  
laciurn Polyplusium Forticulorum et Setonurn reseratum,* &ct  
*Bremcs,* 1632-I633. 4to.

**PETRUS LAURENBERGIUS**

Was Professor of Physic and Philosophy at *Rastoch.* He was;  
in the Opinion of *Rdolanus,* but an indifferent Anatomist. His  
Works are, *Ifagcges Anatomica Graces Interpretatio, Lugd.  
Balau.* I6I8. 4to. *Procestria Anatomica, Hitmburgi,* I6I9.  
4to. *Anatomia Corporis humani, Rostochii,* I636. 4to. *Francos.*1665. 12mo.

**FABRICIUS BARTHoLETUS.**

This Author was hern at *Bologna,* in I588. and was Pro-  
feffor at *Pifa.* He died in I 630.

He wrote an Anatomical Piece, intituled. *Anatomica humani  
Mierocofmi Descriptio, Bononiae,* 1619. *Fol.*

**JOHANNES REMELINUS**

Was of *Ulrn, in Swabia.* His Work is only remarkable for  
. she Figures; which are contrived in such a manner, that upon  
listing up that Part of the Figure, which represents the exter-  
**nal** Parts, those winch are situated underneath are discovered ;  
and upon removing these, others, winch lie deeper, appear.

*Stephanus Mechels.pachier'CD^crcjna.* these Plates. They were  
Itublished under the Tide of, *A Survey of the Microcosm,* or *The  
Anatomies of this Bodies of Men ana Women,* &c. *London,* I702.  
*Fol.* In *Latin* it appear’d before, in I6I3-I6I4-X6X5-I019.  
and in *Dietch,* 16.45s

**ROnnAT FLUDDs**

This Author was of *Salop.* He, jn his Youth, followed  
the Profession of Arms ; but was afterwards made Doctor os  
Physic at *Oxford,* and Fellow of the College of Physicians.  
He died in I037.

HisWork is intituled. *De. Anatomia Triplici, Francos.* 1623.  
*Fol..*

**RICHARD BANISTER,**

An *Englsib* Surgeon, wrote an Anatomical Description of  
the Eye, which is exunt in the first Part of his Work, inti-  
tuled, *A worthy Treatise of the Epos, containing ths Knowledge  
and Cure* o/ II3 *Diseases incident unto them and the Eye-lids,*printed *London,* I622.

**CASPAR AsELLIUS.**

This Anatomist was born *nt..Cremona,* and was Professor of  
Anatomy at *Pavia.* He is celebrated for being the first, amongst  
the Moderns, who took Notice of the Lacteal Vessels in the  
Mesentery, which he describes as conveying the Chyle to a  
large Gland, situated in the Centre of the Intestines ; but this  
Account, he confesses, is taken from the Appearances in Brute  
Subjects. He modestly declines the Honour of this Discovery,  
because he says these Lacteals were known to *Hippocrates, Era-  
sistratus,* and GaZ?n. This Discovery was made in I622. .

, His Works are. *De Lactibus, feu Lacteis Penis, quanto Faso-  
rum Mes.craicorum gencre novo inilento. Dissertatio, cum Figuris  
elegantissimis, Mediolan. .tsprtsp. Basil.* 1628. *Lugd. Batavc*I64o. 4to. I64I. *Svo.* It is also extant with the Works’ of  
*Spigelius,* revised by *Pander Lindenq* and in *Visungius,* illustrated  
by *Blasiusi ...*

**WILLIAM HARVEY.**

This celebrated Physician was hern at *Fallstone in Kem,* in ‘  
the Year I 577. He studied five Years at *Padua,* where he  
took a Doctor's Degree ; afterwards took the same Degree at  
*Cambridge*; and having been Physician to King *fames* and  
King *Charles* the First, and President of the College os Physi-  
cians, he died in I657, in the Eightieth Year of his Age.

His Discovery of the Circulation os the Blood, was of the  
most Importance to Physic of any .that was. ever made, and  
acquir'd him an immortal Names But as it has been frivolous-  
ly disputed, whether the Honour of it belongs to him, I shall  
transcribe a Passage from *Wottarrs* Reflections on antient and  
modern Learning, which sets this Assair in a true Light.

This Discovery, first made perfectly intelligiblehy Dr. *Har-  
vey,* is of so Very great importance to shew the Communica-  
tion of all the Humours os the Body with each other, that as  
soon as Men were perfectly satisfied, that it was not to be con-  
tested, which they were in a few Years, a groat many put in.,  
for the Prize, unwilling that Dr. *Harvey* should go away with  
all the Glory. *Vander Linden,* who publish'd a most exact Edi-  
tion of *Hippocrates in Holland,* about thirty Years ago, has  
taken a great deal of Pains to prove, that *Hippocrates* knew the  
Circulation of the Blood, and that *Dr i. Harvey* only revived it.  
The Substance of what has been said in this Matter, is this:  
That *Hippocrates* speaks, in one Place, *of the usual and constant  
Motion os. the Blood:* Thet, in another Place, he calls *the Feins  
and Arteries the Fountains of Human Nature, the Rivers that  
nuatcr the whole Body, and convey Life; and which, if they, ba  
dried up, the Man dies r* That, in a third Place, he fays. *That  
the Blood-vessels, which are dispersed over the whole Body, give  
Spirit, Moisture, and Motion, and all spring from one ; which  
one* (Blood-Vessel) *has no Beginning, nor no End ,for where there  
is a Circle, there is no Beginning /*

These are the clearest Passages that are produced, to prove  
that *Hippocrates* knew the Circulation of the Blood ; and it\* is  
plain from them, that he did believe it as an Hypothesis; that  
is, in plain *Englissr,* that he did suppose the Blood to be carried  
round the Body by a constant accustomed Motion: But that he  
did not know what this constant accustomed Motion was, and  
that he had not found that Course, which, in our Age, Dr.  
*Harvey* first clearly demonstrated, will appear evident from the  
following Considerations, (i.). He says nothing of the Circu-  
lation of the Blood in his Discourse of. the Heart, where he  
anatomizes it aS well aS he could, and speaks of the Ventricles  
and the Valves, which are the immediate Instruments by which  
the Work jo done. (2.) He believes, that the Auricles of the  
Heart are like Bellows, which receive the Ain to cool the  
Heart r Now there are other Uses of them certainly discovered,  
fince they assist the Heart in the Receiving of the Blood from  
the Vena Cava, and the Vena Pulmonaris. This no Man,  
that knows how the Blood circulates, can be unacquainted with ;  
and accordingly would have been mention'd by *Hippocrates,* had  
he understood it. (3.) *Hippocrates* speaks os Vents, aS receiV-  
ing Blood from the Heart, and going from it; which also was \*  
the constant way of speaking os *Galen,* and all the Antients,  
Now no Man, that can express himfels properly, will ever say,  
that any Liquors are carried away from any Cistern, aS from  
a Fountain or Source, through-those Canals which, to his  
Knowledge, convey Liquors to that Cistern. (4.) *Hippocrates  
sessu,* the Blood is carried into theDungs from the Heart, for  
the Nourishment of the Lungs, without assigning any other  
Reason. These seem to be positive Arguments, that *Hippo-  
crates* knew nothing of this Matter; 'and, accordingly, all his  
Commentators, antient and modern, before Dr. *Harvey,* never  
interpreted the former Passages of the Circulation of the Blood :  
Neither would *Pander Linden,* in all Probability, is Dr. *Har-  
vey* had not help'd him to the Notion ; which he was then re-'  
solved to find in *Hippocrates,* whom he supposed to he not the  
Father only, but the Finisher also, of the whole Medical Art.  
It is pretended to by none os the Antients, or rather. Admirers  
of them, after *Hippocrates.* As for *Galen,* any Man that reads -  
whet he says of the Heart and Lungs, in the sixth Book of his  
*De Usu Partium,* must own, that he does not discourse as if he  
were acquainted with modern Discoveries ; and therefore it. is  
not so much as pretended, that he knew this recurrent Motion  
os the Blond : Which also sarther shews, that is *Hippocrates*did know it, he explain'd himself so obscurely, that *Galen* could  
not understand him; who, in all Probability, understood *Hip.,  
pocraters* Text as well as any of his Commentators, who have  
written since the *Greek* Tongue, and much more since the *Ionic*Dialect, has ceased to be a living Language.

Since the Antients heve no Right to so nobse a. Discovery, it  
may be worth while to inquire; to whom of the Moderns .the  
Glory of it is due ; for this is also exceedingly contested. The  
first Step that was made towards it, was, the finding that the  
whole Mass of the Blood passes through the Lungs, by the Pul-  
monary Artery and Vein. . . .

The first thet I could loner find, who had a distinct Idea- of  
this .Matter, was *Michael Seruetus,* a *Spanish* Physician, who

was burnt sor Arianism at *Geneva,* near I4o Years ago. Well  
had it been for the Church os *Christ,* if he had wholly- confin'd  
himself to his own Profession l Hrs Sagacity in this Particular,  
hefore so much in the Dark, gives us great Reason to believe,  
that the World might then heve had just Cause to heve blessed  
his Memory’. In a Book os his, intituled. *Christianismi Resti-  
tutio,* printed in the Year 1553. he clearly asserts, thet the  
Blood passes through the Lungs, from the Right to the Left  
Ventricle os the Heart, and not through the Partition which di-  
vides the twoVentricles, as was at that time commonly believed.

*Realdus Columbus,* of *Cremona,* was the next that said any  
thing of is, in his Anatomy, printed at *Fenice,.* I559. in *Folio,*and at *Paris,* in I572. in *Octavo,* and afterwards elsewhere.  
There he asserts the same.Circulation through the Lungs, that  
*Servetus* had done hefore ; but says, that no Man had ever taken  
Notice of it before him, or had written any thing about it:  
Which shews, that he did not dopy from *Servetus* ; unless one  
should say, that he stole the Notion, without mentioning Ser-  
*veturs* Name ; winch is injurious, fince, in these Matters, the  
same thing may be, and Very often is, observed by several Per-  
sons, who never acquainted each other with their Discoveries.  
But *Columbus* is much more particular ; for he says, That the  
Veins lodge the whole Mass of the Blond in the Vena Cava,  
which carries it into the Heart, and so it is thrown into the  
Left Ventricle ; and by'the Aorta again, when enliven’d by  
the Ain, diffused thro' the whole Body.

Some Years aster appear’d *Andreas Cafalpinus,* who printed  
his *Pocipatetical.Questions ztVinice, in quarta,* in I57I. and  
afterwards, with his *Medical squestions,* at the same Place, in  
I 593. He is rather more particular than *Columbus,* especially  
in examining how Arteries and Veins join at their Extremities ;  
which he supposes to he by opening their Mouths into each  
other : And he uses the Word *Circulation* in his *Peripatrtical  
Questions,* which had never been used in that Sense before. He  
also takes Notice, that the Blood swells helow the Ligature in  
Veins, and urges that in Confirmation of his Opinion. Some  
Hints of this Matter are likewise to be sound in *Constantius  
Varolius,* who printed his Anatomy in the Year I59I.

At last Dr. *William Harvey* printed a Discourse on purpose,  
upon this Subject, at *Francfort,* in I628. .. .. .

This gave him a just Title to the Honour os so noble a Dis-  
covery, since what his Predecessors had said before him was not  
.enough understood, to form Just Notions from their Words.  
One may also observe how gradually this Discovery, as all abs-  
truse Truths of human Disquisition, was explained to the  
.World. *Hippocrates* first talked of the usoal Motion of the  
Blood. *Plata* said, Thet the Heart was the Original- of the  
Veins, and of the Blood, that was carried about every Member  
os the Body. *Aristotle* also, somewhere, speaks-of a recurrent  
Motion os the Blood. Still all this was only Opinion and Belief:  
It was rational, and became Men of them Genius ; but not  
having aS yet been made evident by Experiments, it might aS  
easily he denied as affirm'd. *Servetus* first saw, that the Blond  
passes thro’ the Lungs ; *Columbus* went farther, and shewlu the  
Uses of the Valves, or Trap-doors of the Heart, which let the  
Bleed in and out of their respective Vessels, but not the self-  
same Road. Thus the Way was just open when Dr. *Harvey*came, who built upon the first Foundations: To make his  
Work yet the easier, the Valves of the VeinS, which were dis-  
cover'd by Father *Paul* the *Venetian,* had not long before been  
explain'd by *Fabrtiius ab Aquapendente*; whence the Circulation  
was yet more clearly demonstrated.

There was one thing still wanting to complete this Theory,  
and that was, the Knowledge how the VeinS received that  
Blood which the Arteries discharged: First, it was believed  
that the Mouths of each sort os Vessels join'd into one another:  
That Opinion was soon laid aside, because it was found, that the  
: Capillary Vesseis were so extremely small, that it was impossi-  
ble, with the naked Eye, to trace them. This put them upon  
imagining, that the Blood ouzes out of the Arteries, and is ab-  
sorb’d by the Veins, whose small Orifices receive it, as it lies in  
the Fibres of the Muscles, or in the Parenchyma os the  
Bowels; which Opinion has been generally received by most  
Anatomists fince *Dc.-Harves.s* Time:.But *Leeuwenhoeck* has  
lately sound in several sorts of Fishes, .which were more ma-  
nageable by his Glasses than other Animals, that Arteries and  
VeinS are really continued Siphons, Variouily wound round  
each other towards their Extremities, in numberless Mazes,  
over all the Body : And others have found whet the says to he  
very true, in a Water-newt; so that this Discovery has passed  
uncontested. And since it has been constantiy found, that  
Nature follows like Methods in all sorts of Animais, where she  
uses the same sorts os Instruments, it will always be believed,  
that the Blood circulates 'in Men, after the same manner as it  
does in Eeis, Perches, Pikes, Carps, Bats, and some other Crea-  
tures, in which *Lenauenhoeck* tried it. Tho’ file Ways how it.  
may he visible to the Eye, in human Bodies, heve nos, that I  
know os, been yet discovered.

But *Thomas Bartholine* and *Consensus* have raised up a mo-  
dem Rival to *Harvey, sue* the Honour of the Discovery os che

.Circulation, which is the celebrated Father *Paul.* “What they  
relate amounts only to this; that in a Manuscript of Father  
*Paid’s,* which was left in the Hands of Father *Fulgentius* at  
*Venice,* the Particulars of the true Circulation of the Blond, as  
publish'd by *Harvey,* are contain'd ; and hence they conclude,  
that he communicated it m *Fabricius ab Aquapendente,* who told  
it to *Harvey* whilst he was at *Padua.*

But the Truth of the Affair appears to be ; that after *Har-  
veestes* Return to *England,* he made a Present of his Book, just  
then publish'd, to the *Venetian* Embassador; who, immediately  
after going heme, lent it to Father *Paul,* -whose Curiosity led  
him to make some Extracts from it, which are contain'd in the  
Manuscript above-mention'd. . . v .

What made this Story the more likely to he triiei-was Father  
*PaulA* Sagacity in Anatomical Researches, who *fast observed*the Contraction and Dilatation of the Pupil of the Eye; and is  
said to have .communicated to *Fabricius ab Aquapendente* his  
Knowledge os the Valves in the Veins. \* ’..

Besides this Discovery of the Circulation, *Harvey* made  
several with respect to the Generation os Animals.

HiS Works are, *Ex er citatio Anatornica de Motu Cordis et San-  
guinis in Animalibus, Franeof.* I628. 4to. *Lugd. Batav.* 1639.  
*Ao. ibid.* 1647. *Cum Refutationibus AEmilii Parisiarii, lifers.  
Patavii,* 1643. It is likewise in a Book, intituled, *Reienlio-  
rum Disceptationes de Motu Cordes, etc.* printed *Lugd. Batav.  
lifer].* .her. Then it appeared in *Englisu,* printed at *Rotterdam,*I67I. His *Exercitationes duae de Circulatione Sanguinis, Potero- .  
dami,* I649. *Epistola ad Johan. Dan. Horstium de Inventis  
Afellii et Pequeti,* are in the Decad of *Medical Epistles* of *Job.  
Dan. Hirsutus.*

*Exercitationes de Generatione Animalium, London..* I 65 1. 4to.  
*Amstel.* I65I. I652. Iinno. *Haga Cornetts,* I680. Ilrno. In  
*Englisu* at *London,* I653. '

**CASPAR BARTHOLINUS."**

This Author was a *Dane,* bom in I585. After Visiting most  
of the most famous Universities, and attending the Lectures of  
the most celebrated Profesiors, he was made Royal Professor at.  
*Copenhagen*; then turn'd his Studies to Divinity, and died in  
I63O. in the Forty-fifth Year of his Age. 'He was Coteinpo-  
rary with *Harvey. i*

His Anatomical'Works are in much Esteem, which are his  
*Anatomica Institutiones,* printed αίἰὓμα'ιβόΐ. *Argentorati,* 1626.  
*Rostoch.* 1626. *Gosiartie,* I632. *Oxonice,* 1632. These Justi-  
turions were inlarged by *Bartholine* the Son, and publish'd in  
different Years at different Places.' They were pnbhshlu in the  
*German* Tongue, *Hasmce,* I648. HiS *Contrdversia 'Anato-  
mica, Gosiariee,* I 631.. His *Enchiridion Physicum, Argentina,*I6c2. ,

To *Caspar Bartholine* I shall subjoin his Son and Grandson,  
tho'. not properly belonging to this Place.

**THOMAS BARTHOLINUS. ; '**

This Physician was the Son of *Caspar Bartholine,* and born  
at *Copenhagen* in I til 6. He was Professor at the Place of his  
Birth, and enrich'd Anatomy with many useful Discoveries. Ho  
claims the Glory os having first observed the Lymphatic Vessels;  
but the Pretensions os *Olaus Rudbeckius,* and Dr, *Jullis.se,* an  
*Englisu* Physician, to the same Discovery, renderthis Title to it  
doubtful. *Rudbeckius* publish'd his Observations much about  
the same time aS those *of Bartholine* appear'd ; and Dr. *Jollis.se*shewed the same to several os his Friends, but without publish-  
ing any thing concerning them. The Discoveries being un- .  
doubted,-and. all three working upon the same Materials, there .  
seems no Reason to deny any os them the Glory of their Inven-  
tionsi The thing which they found was, thet there are innu-  
merable small clear Vesseis in many Parts os the Body, chiefly'  
in the lower Belly, which convey’ a colourless Juice either into  
the common Receptacle of the Chyle, or else into the Veins,  
there to mix with the Blood.

He also pretends a Tide to the Discovery of the *Thoracic  
Duct*; shut this .is also disputed with him by *Van Horne,* and  
*Pequet. . . . ...*

His Works are *Anatomia ex Cas.pari Bartholini parentis Insti-  
tutionibus, etc. Lugd. Batav.* I64I. *ibid.* I645. *lhid.* 165 I.  
*Haga Comitis,* I655. *ibid.* I66O. *ibid.* 1663. *Ratcrod.* 1669.  
*ibid.* I673. *AnatomicaAncurismasu difficti Historia, Panormi,'*I644. *De Lacteis Thoracicis in .Hamine Brnttfssi, nuperrime ob-  
servatis Historia Anatomica, Hafniee,* I 652. *Landini,* I652-  
*Parisus,* I 653. *Genevas, sLSAn Lugd. Batav. et Ultra Traject.*I654. It is also in the *Messis Anna* of *Siboldus Hempsterhuis,*printed *Hoidelbergce,* I b59.' and with his own *Opuscula, Hafniee,*rbyo. *Vasia Lymphaticas nuper Hafniee in Animantibus inventa,  
et in Iiornine, Iias.niee,* rb53» .Isi54. *Parisiis.* They are .also  
extant with *Siboldus Hempsterhuis, Messis Aurea, Hoidelberga,*I 659. and also with his own *Opuscula,* printed *Hasmce et.Acn-.  
stelodarni,* I 67O. *Historla nava Vasorum Lymphaticorum,* pub-  
lish’d with *Le Clerc* and *Maugeheds. Bibliotheca Anatomica,* print-  
*ed Ganev.* I685. *Dubia 'Anatomica, Has.nia,* I653. *Parisiis,*I653. *Defensio Vasorum Lacteorum, etc. Hafniee,* And

*with his Opuscula Anatomica, siOpo. HistoriarumAndtomica.  
rum Centuria prima et secunda, Hafrsiae,* I 6 54. *Historiarum  
Anatomicarum Centuria tertia et quanta, ibide* I 657. *Hestoriar.  
Anatomicar. Cent, quinta et sexta, .Hafnia,* I 66 I. *Vindicia  
Anatomicae, Hafniae,* I64S. *Opuscula nova Anatomica , Hafnia*h? *Acastelod.* 1670. *Observationes AnatomicaPetriPawi,* paint-  
ed in his third and fourth Centuries of his own Observations,  
*Hafneae,* I657. *Collegium Anatomicum, Hafniae,* I65I. *Spici-  
legium primum ex Vasts Lymphaticis, Hasuiae,* I655. I658. lon-  
*Anchii,* I660. *Amstelodami,* I66I. Alfo with his *Opufcula,*printed *Hafniae,* I 67p. *Specilegiurn secundum ex VasascLympha-  
ticis, Acastelnd. 1660. Spicilegia bina ex Vasts Lymphaticis, Acaste-.  
Edams,* I66I. And with bis own *Opufcula nova Anatomical,  
Hiiseua,* I 670. *Dissertatio Anatomica de Hepate defuncto, Hase  
niae,* I66I. Arid with his *Opufcula Anatomica nento, Hafniae,*I67O. *Responsa de Experimentis Anatomicis Biljianis, etc. Haf-  
nia,* 1664. *Amstelodami,* I66I. And with his *Opufcula nova  
Anatomica, Hafnia,* I 670. *De Hipatis .exautoroti Causae  
desperata, Hafnia,* I666. And with his*fopuseula Anatomicae  
ruva, Hafnia,*1670. *De Cerebrisubstantia pengul,.etc. Hasp-  
niae, ihdur. De Anatem e Practica ex Cadaveribus morbosts ader.  
nanda Consilium, etc. Hafniae, :s fa De Pulmonum Substantia*

*et rnotu Diatribe, Hafnea,* I663. *Lugd. Batawr.* I672.—.—  
Vander Linden, p. I003.

He left two Sons, *Caspar.uni Thomas y* the former of.whom  
Published many of his Father’s Works. He also wrote upon  
ths Ovaries of Women, Generation, and the Structure of the  
Diaphragm; and is said to heve fust discovered she inferior and  
lesser Salivary Ducts. He farther speaks of a new Method of  
preparing the Viscera for Anatomical Uses. . . . .

His Anatomical Works are,. *De Ovuriis Mulierum, etc.  
Roma, ipo'i. Amstelodami,* I678. *Narimberga,.* I67.9. ,*Epi-  
stola de Nervorum tlfu in Musculorum Metu, Paristis,* I676.  
*Diaphragmatis Structura nova, Paristis,* I676i *Administratib-  
majn Anatomicarum Specimen,* publish’d with *Michaelis Lyferi  
Cultrum Anatomicum, Francofurci,* I679: *Exercitationes Miscel-  
laneae, maj 5.* There are likewise fevera! of his Anatomica!  
Pieces printed in the *Acta Hafneensea. '*

From the Time of the great *Harvey,* there have been such  
a Multitude of Anatomical Writers, that a particular Detail os  
them would of itfels require a Volume. I shall therefore only  
give an alphahetical Catalogue of the principal, and take some  
Notice of their Discoveries, when of any Importance. J must,  
however; remark", that it would have Seen fortunate for Ana-  
tomy, and Students in this Science, if Authors could heve con-  
Tented themselves with publishing their own Discoveries, and  
animadverting-upon the Errors of others i But, instead of doing  
this, many heve thought, that a Discovery, sometimes trifling  
enough, or a Professor’s Chair, have intitled them to write an  
entire System ; thus making it necessary to search large Volumes  
din Discoveries, which a few Pages were sufficient to contain!

**ALBINUS,**

t -A Professor at *LieydeKi* had Published forne Anatomical Pieced  
-which are in much Esteem and the Wodd is rn Expectsnon  
- of more from the fame Hand; His Works which have come  
to my Knowledge, are as follows i ' . ' 1 ’

*. -Historia Musculorum Hominis, 'lingular. Batap. fnpqui dur.*

*iliones Osseum Foetus humans', accidie Oseeogrniae brevis Hijla-  
uria, Lugdim. BataOs eao. so-*

*Tabula Anatomica, Lugdan. Batavo 41. Fol.*The last is not yet completed.

"sc.T.BELL'tNI (LAuRENTIUs)i

... HinAnatomical Works are,. - ‘si -. - -

*.. De Structura Riorum...* : o -

*Gustus Organum navissime detectum.. -*

Of both which there have been several Editions. I heve seen  
One printed *Liigdecai Bat.* I7Ii.

**BERGYEUS (JOHANNEs GoDoFREDUs).**

He was of *Hall in Saxony,* hut Professor of Physic at *lVirtem-*

*borc. . . ' - - / et.*

His principal Anatomical Piece is an Epistle concerning the  
.Division ofthe Aorta, principally -with respeit to its ofcending  
. Branches, . . ‘ ‘: '

*i* **BEsLERUs (MICHAEL RUPERTUi).**

.. He was of *Nuremberg,* hem I6o7. died I66I. according to  
*Goelicke.* His Anatomical Works are, ' .

*Admiranda Fabrica humana Mulieris partium Generationi  
potissemum inservientium, et Foetus, fidelis,'quinque Tabu,lis, ad  
' magnitudinem naturalem et genuinam, typis aeneis impresses, haste-  
'rrns ' nunquam visa. Delineatio. Noriherga, apud Jeyerniarn*

*Dumlertcm, 1640. in Fell* , , ... L..

*Observatio Anatemics-medica lingularis cuyuselam, Calendar.  
?anuar.* I 644. *tris sales naturalis magnitudinis viventes, enixa.*

*uerpera vero retentis secundinis extremum quast halitum spirabat,  
'intra aliquot horarum spatium, dextra divinitus adminiculante,  
'summa eum adjiantium admiratione et support, feliciter evasa.  
'Nariherga,* I644. in per. . ' . ,.

**VOL. I.**

**BIDLOO (GOTTOFREDUs).**

He was Professor, at *Leyden, A* Surgery and Anatomy. He  
publish’d a hundred and five magnificent Figures of different  
Parts of the Body, *Acastelodam.* I6S5. in a. very .large Follo,  
some of which are laid not to be according to the tain. *Cow-  
per*'.corroded these. ...... 6,.

*Opera omnia Anatomico-Chirurgica edita et inedita, Lugdun.  
Batav.* ryI5. . 5 .. . Γι ς. '

.His *Exercitationum Anatomica-Chirurgicarum Decas* was  
printed *Lugdun. Bat. rjcist.*

**BLANCAKDUS (STEPHANUs)**

-. Publish’d some Anatomical Pieces, which are said to he very  
indifferent Compilations.

**BLASIUS (GERHARDUS)**

Publish’d fevemi Anatomical Treatises, as, ,  
*- Commentarius in Syntagma Anatomicum Joharmis Vestingii,  
cum Figures, Aiastelodam.* I659. *'esto.*

This was reprinted at the fame Place; I 666. 4.ο. This Edi-  
tion is said,to be the best. , :

*' - De Penibus mcnserofis,* published with *Bellirii Exergiiat.  
Anatomica de Struct. Renum,* I665. I2»rs.

*Anatcme -contracta, Amstelndarn.* I666. *luna..* i

*Anateme'IlAedullae Spinalis, et 'Narvorurn inde provenientium,  
Amsteled. apud Cafparum Commelinurn,* I666. in i2»ri.

*Observata Anatomica in Homine, Simia, Equo, Vitulo, Testu,  
dene. Echine, Glire, Serpente,' Ardea, 'variifque Animalibus  
aliis. Accedunt extraordinaria in Hamine reperta, .Praxin Medi-  
cam aeque ac Anatomen illustrantia, Lugde Batav. et Amseeled.  
apud Gaaseeeck,* I674. in *8va. . . .*

*- Zootsmiae seu Ana tomes variarum Animalium pars prima. Am.  
fi eled. apnd Abrahamum Woolffgang,* I676. in 8υο.

*Anatome Animalium Terrestrium variorum. Volatilium, Aquari- .  
lium, Serpentum, Inseclorum-, Ovorumq, Structuram naturalem,  
ex Veterum, Peceniiorum, prspriifq., observationibus proponens.  
Figuris variis illastrata, Anast elint, apud Viduam Johannes a  
Simaereii, 16S1'.* in quii -

**BoHNIUs, (JOHANNEs)**

Professor of Anatomy at *E'eiststc.* Several Anatomical Obser-  
vations are dispersed in his works, the principal of which are  
relative to the Biliary Dutio, and Bllei -

**BoNETUS (THEoEurLUs)**

Collecied with imineofe Labour-, and publish’d, a prodigious  
Number of Dissections,-.which had been made upon Bodies  
which died of Distempers, or Casualties, thereby excellently  
explaining the immediate Causes of Diseases and Death. This  
Work is, perhaps, the most valuable Piece which the Modems  
Have produced, and the best adapted to render a physician per-  
fectiy acquainted with the Indispositions of the human Body.

No Physician should he a Day without consultiog this Au.  
thor. - ; . .. . r '. i' '  
' His large Work, intituled, *S'eputclrretumsave Anatomia Pro.,  
riica,* was first published in two Volumes, *Genevae,* I 67 9. *Fol.  
i dlAangetus* published another Edition, with considerable Addi-  
tions’, in three Volumes, *Lugd.* I70O. ;

. ..There is alfo another Piece on the fame Subjects intituled,  
*Arodrsrnus Anatondae practica, five de abditis ststcrborum Cau-  
ses, eu Cadaverum Dissectione reveheris. Libri primi Pars prima,  
de Doleribus capitis, ex illius apertione 'manifestis, Geneva,  
apnd Franciseurn Miege,* I675. in 8of. . -

\_ - ‘,τ ... ’ **, BoNTIUs (JAcoBUs)-**

Publish’d some Anatomical Observations; which are extant,-  
amongst other Treatises, in his *Medicina Indarum, Ltigd. Bdeav.  
1642. s2me. Acasteledarn.* I658. *lime.*

-They are alfo. amongst his *Opuscula varia, 'Amsterdam.* - I65 8.

*Fol. . -*

.... These are alfo printed with *Prosper Alsanus’o Modicina  
Ac'gyptiorum, Parisis, I*646. 4.ο. and *Eusd. Bat.* I7I9. per.

**υ : ' BoRELLUS (ALPHONSUs)**

. - Gave » Mechanical .Account of the Motion of Animals,  
.drawn from the Structure of the Parts. AS he hed the Advan-  
tages of DI. *Lower's* Discoveries, with respect to the Order of  
the mufcular Fibres .of the Heart, he was enabled to give a  
.Solution of all the Appearances of the Motion of the Heart, and  
of the Blood in the .Arteries, upon Mathematical and Mecha-  
nicai Principles. . His Anatomical Works are.

*De Penum Ufu Indicium,* publish’d with *Bellini de Structura  
Renum,Argentorati,* I664. 8υο.

τ *De Metu Animalium,* publish’d in the *Bibliotheca Anatomica*of *Mangei* and *Li Clerc. \_* . . 2

Briggs **(WiLLIAM)**

Wrote an accurate Description of the Eye, with the Method  
’of dissecting it, intituled, *Ophthalmographia, Cambridge, tdurp.  
Svec* This is alfo extant in *Manriturs Bibliotheca Anatomica.*

From the Structure-of the Eye he form'd a Theory of Vi-  
sion, which is extant in *ffie Acta Eruditorum,* I683.

' He discover'd, that in the *Tunica Retiformis,* which Is con,  
tiguous to the vitreous Humour, the Filaments of the Optic  
Nerve there expanded he in a most exact and regular Order,  
all parallel one to another; which, when they are united after-  
wards in the Nerve, are not . shuffled confusedly together, bur  
still preserve the same Order till they come to the Brain. The  
crystalline Humour had already been discover'd to he of a double  
convex Figure, made Of two unequal Segments of Spheres, and  
not perfectly spherical, as the Antients thought: So that this  
farther Discovery made by Dr. *Briggs,* shews evidently, why  
all the Parts-of the Image are so distinctly carried to the Brain,  
fince every Ray strikes upon a separate Filament of the Optic  
Nerve; and all those Strings so struck are moved equally at the  
same time. τι: ..st : - -

He also describes the Ducts which convey Moisture tothe  
Eyes, from the Glands in the Corners thereof, for the Conve-  
nience of their Motion in the Orbit.

**BRowN, (JOHN)**

A Surgeon of *Saint Thomases* Hospital, wrote an Epistle con-  
cerning the glandulous Substance of the Liver.

**BRWNERUS (JOHANNES CONRADUs)**

Wrote about the Pancreas, Intestinal Glands, and **the**Lymph. His Work is intituled. *Experimenta nova circa Pan-  
creas, Amstelodami,* I683. 8tio.

**CAssEBOHM {JOAN. FREDERICUs)**

Wrote an Anatomical Work, under the following Title: .

*Tractatus quatuor Anatomice de Aure humana, tribus Figura-  
rum Tabulis illustrati. Auctore Juan. Frid. Caessebohm, Halae  
Magd.* I734. in 4to. ‘..

**CHARLIoN (WALTER)**

i Publish’d some Anatomical Works:

*Exercitationes Physico-Anatornicae, sive Oeconomia. Animalis,  
novis in Medicina iiypothesibus superstructa, et Mechanice ex.,  
plicata, Londini, apud R. Dani e lis, et Jo Redrnannum,* 1659.  
in.I2zso. *Amstelodami, apud si oh. Rauensteyn,* I659. in-iatHo.  
*Lugduni Batavorum, apud Petrum de Graaf,* I678. in Iinno.  
*Hagee Comitis, apudAmoldum Lecrs,* I68I. in *izmo..*

*Excrcitationes Pathologicae, in quibus 'Morborum pene omnium  
Natura, Generatis, et Causa ex novis Anatomicorum irruentis  
sedulosuquirlapsor, Londini, apud Thomam Newcomb,* **I66.I... in  
esto. . \* si**

*Onomasticon Zoinon plcrorumque Animalium Differentias et  
'Nomina prepria pluribus Linguis exponens. Cui accedunt Mantisi-  
sia Anatomica, et quaedam de varies Fossilium Generibus. Sarte,  
dini, apudJucobum Allnstry,* I668. in *eso. Ibidem apud eun-  
dem,* I67I. in *4to. Oxonii,* I673. in *Fol. mint 1 -*

**CHESELDEN (WILLIAM) i .**

Publish’d the ANATOMY OF **THE HUMAN** BoDY, of which  
there have heen five Editions, the last of winch was printed at  
*London, Djefo.* This Work is interspersed with many curious  
Chirurgical Observations; and is illustrated with forty accu-  
rate Copper-plates.

He also lately publish’d an Osteology, with magnificent Fi-  
gures. In this there is an accurate Account of the .Diseases, of  
the Bones. ’.Esq -V '

**LE CLERc, (DANIEL)**

Together with *Mangeius,* publish'd the *Bibliotheca Anato-  
mica,* which as *Λ* Collection of Anatomical Authors. See  
**MANoETUS. ss . \_ ...—**

**-- CowPER (WILLIAM) . Λ**

.' Publish'd *BidloOso* Anatomical Figures, with many Additions  
and Improvements. . \*

- This has lately **been reprinted in** *.Holland,* **under the Direc-  
tion of** *Albinus. . ..... . :.*

He wrote also excellently on the Muscles. His Works are  
interspersed with many curious Chirurgical ObferVations.

. \* This Author is said Io he rhe fust who gave a Figure of the  
Thoracic Duct, as it is found in human Subjects ὁ whereas pre-  
ceding Anatomists delineated it from Brutes,

.He also discover’d certain Glands in the Urethra, which  
have heen since called *Glandula Cowpcri* -but *Cheselden* dis-  
.putes their Existence.. . ... so

**DEUSINGIUS (ANToNIUS) τε - .**

Was Author of a great many Books ; an Account Of which  
-may he seen in *VanderLrnden. Some os these were* Anatomi-  
cal ; but I don't know that he made any particular Difco-  
verses. ' \_

**DiEMERnROECK (ISBRANDUS rfe) - -**

Was Professor of Anatomy at Ufrerbr. *Goelicce* blames him for  
not publishing his Discoveries separately, instead of writing s

whele Body of Anatomy στ A Fault common to him, with a  
Multitude of other Writers. He also accuses him of making  
tedious Digressions, sometimes not much to the Purpose ; and  
he farther says, his Discoveries are not always to be depended  
upon, some of them.being rather the Offspring of Imagination,  
than the Result of Experience. His Figures are not remark-  
ably exact, for which he blames his Engraver in his Preface.

His Works are. *De Peste Libri quatuor, Arenaci,* I 646.  
*Amstelodami,* I665.' *Disputationum Practicarum Pars prima  
et searnda de Morbis Capitis et Thoracis, Trajecti ad Rienum,*I664. *Anatome Corporis humani, etc. Llltrayecti,* I672.  
*Geneva,* I679. *Lugduni,* I679. These two isst-mention'd  
Editions are vastly more correct than the others and adorned  
with sar corrector Plates. ..«“'"T -

DIoNIs.

He was Demonstrator of Anatomy at the Royal Garden at  
*Paris,* where be had great Opportunities of dissecting Bodies,  
**He** publish'd a Book on the SubjectOf Anatomy, which is in  
pretty good Esteem, and of which there have been many  
Editions. -.

*Dionis* has had an Honour done him,- which very few *Euro.,  
pedn* Authors have attain'd to, which is to have his Anatomy  
tranilated into the *Tartar* Language, now used at the Court of  
*China.* This was done by Father *Parenni,* a Jesuit Missionary,  
at the Command of *Cam-Hi,* Emperor of *China,* who died in  
17 22. But this was a Compliment paid *Dwnis* by his Conn-  
Hyman, the Translator, and not by the Emperor; for *Parent  
alls* Instructions were to translate the best *European* System os  
Anatomy. '

- i **DOUGLAS (JAMES). δ᾽ - :**

This Gentleman was very eminent in the Practice of Mid- '  
wifry, and an accurate Anatomist. His Memory is too fresh  
to make any further Account of him necessary. His principal  
Anatomical Works are, . . ...

*Bibliographies Anatomica Specimen,* which was. first printed  
at *London,* and afterwards, with Additions, at *Leyden,* by ssZr  
*binas, TTSA. Octavo. . . .. ..*

*Myographies comparata Specimen, London, I joy.* In this  
Book, the Author remarks the Differences betwixt the Muscles  
in Men and in Dogs. . ψ ' *-a ' -*

This was transtated into *Latin,* and printed at *Leyden,. sTllecsa  
. A Description of the Peritonaeum, London, grJ SP\** Dr. *Freind,*in the first Volume o f his History Of Physic, speaking of the  
Operation for a Hernia, says, that to form a right Notion of  
the Distention to which the Peritonaeum as subject, **.one** ought  
to see the curious Preparations of that diligent and accurate  
Anatomist, Dr. *Douglas,* who is the first that has given us **any**true Idea of the Peritonaeum; a Part which is much concerned,  
and whose Structure should he so much consider’d, not only in  
this Operation, but in the High Way for cutting for the Stone.  
He too is the first, who has plainly shewn, that the Elongation  
of. the -external Lamella of the Peritonaeum does not form the  
vaginal Coat of the Testicles, as Authors say, but a Coat pe-  
culiar to the seminal Veffeis, which he Very properly Calis *Tu-  
nica siasorum Spermaticorum propria.* And he afterwards Ob-  
served, .in. reading *Paulus,* that this Coat was known to, and  
described by him, by . the Name of ἐλικοπὸῆς, from .the many  
Contorsions there are in those Veffeis which it Covers. . \_ . Ἀ-

**τι st DRAKE, (JAMES)**

An *Engliso* Physician. His Work is intituled *Anthrepologia  
nova,* or, *A Nora System of Anatomy,* os which I have seen  
two editions. A great deal os the first Edition is deft out in  
that os 17 Iy. He had some Very singular Notions with respect  
to the Bile, and the Catamenia. . . . I Τ .

DRELINcoHAT, (CHARI.EsJ ί '

A *Frenchman,* was a celebrated Professor os Anatomy *or. Ley.,  
den,* and -wrote very west on many Anatomical Subjects. Ills  
.Works, principally relating to-.Anatomy^ *are, -*

*De Partu Octimostri vivaci Diatriba, L.Bat.* 1653. *iRmo.*

*Praeludium Anatomicum, A:sm.2. i6Sa. s*

Both these are amongst his *Opus.cula,, L..Bcat..* I680. Ι2νηο.

*Idem, Hagee, t-JN].* . . Ἴ

*De humani Foetus Membranis Hypototuntaues- Lugde Bat.*1685. *island.*

*Experimenta Anettortica ex Vioorum Sectionibus potita, Lugd.  
Nat.* I68I. 1682. 12aso. ’ ‘.' Y . ‘

This Treatise is. in *Mdngetfo Bibliotheca Anatomica y* as alio  
some Pieces of the same Author, intituled *De Conceptu; De Se-  
mine Virili ; item. De Semine Muliebri, Ovis, Utcre, Tubis  
Uteri ; cum Corollariis de humano Foetugi .' '*

**He** was Author ofmany other. Medicinal Pieces.

**DUPREE, s.**

*- Goeliclie* mentions this Author, and informs us, that he pub-  
lished a Description of five Pain of Muscles, which are con-  
**cerned** in moving the Head in different Directions, and which  
**are** inserted into the first and second Vertebra of the Neck

**He,** according to the same Author, described-two Liganients,  
which connect the Head either to the first or second Vertebra  
of the Neck.

**... v .. μ . Ejrr.(GEoRGtfJ .. . -**

- Was an *Englrjh* Physicfen, and President of the College of  
Physicians, He .wrote'an Apology for the Circulation of the  
Blood, in Answer to *AEmilius Parisianus t* This was printed at  
*London,* I64I. *3uo. -*

He also published Animadversions on *Malachias Thurstoofs*Treatise-os the Uses of Respirarien, *Landon,* I678, 8tio.

This Treatise is. in the *Bibliotheca Anatomica usde Glare* and

*Manget. '*

**EUST A CHIUS. ‘ -**

His *Opufcula Anatomica* was printed *Delphis, lyzfi. Sue.*

**FRANCUs, (GEORGIUS FREDERICUS DE FRANCNENEAU)**

A *Dane,* wrote a Treatise on the Nads.- *.Goelickea .' .*

**GARENGEOT (JAtlp’ES CROISSANT DE)**

Wrote an Anatomical Piece under the following Title?which was printed at *Paris,* Τ728. *simo.*

*Miottmie hurnaine, et canine, ou la Maniore de dissequer les  
Muscles de st Homme, et des Chiens* 7 *fubuie estune Miologie cm  
Histoire abrig.ee des Muscles.1 : ’*

\* \* XalheON sTHOMAS)

Wrote a Compendium 6f Anatomy, which is said to have  
nothing in it new ; but to consist entirely of Collections froth  
others. Ho was an *Englijh* Physician, and Fellow of **the**College. \*;' ‘ YE- ‘ „ ς'

**: . . . GI-saSON (FRANCIS).**

Was an Eiryff^Physician, Professor OfPhyfic at *Cambridge,*and Fellow of the College of Physicians. FES principal Disco-  
very was the Duct winch conveys the Bile from the Liver to -  
the Gall-bladder.,. His Works are, . ..

*Anatomia Hepatis, .cui praemittuntur quadam ad rem Anar  
tomicam' umucrse fpectantta, Londini, apud Octav. Pullein.***1654.** *in'Svo.' Arnstelodami, apud Johan. Ravrnfleyn,* **I659. ’***in lumoi ibid, apud foh. Junsseonium a TViubcrge et Elizacurn  
. Weyerstraten,* **I 665,: IinIawo.' d - -**

*«A t* the heid of this there is a Treatise on theXymphs

*Tractatus de Rachitide, seu Morbo Puerili, RicEors dicto,  
Londini, apud Sadlcrttrn, in Svo.*s. *Ibid.* I66O. *in i2rno.*

*. Lugduni Batavorum,*, I67 I. *in Sgio. Hagm. Comitii,, apud Ar-*

*' rnlaum Loci, in limo.* **„ .ς.ς r ss, . . ί**

*' Tractastis de Natura Substantia Energetica^ scu de Vila  
' Naturae, . cyufque tribus primis . Facultatibus : i. Perceptive.***Π.** *Appetitivai 'et,* III. *Motigra, Naturalibusoretc. Londini,  
apud Hi Brome et N.* Hyoher I.672.i As 4to. .

*'\* Tractatus de Pentsichlo et Intestinis cui praemittitur alius,  
Ac partibus continentibus iyigencrey et iyt specie,, de iis Abdominis.  
Ibid, apud eundent ikiaJ. in ^tdur' Arnstelodami, apud facohuryt  
Juniorem, slenfi. in I2mo.* . sisi, i , st- ., ':

The *Anatomia Hepatis,* and *Tractatus de Vijttriculo,* are in  
**/e** Ciwr^and *Mangast.sPiblintbesa Anatomica, 's. ss i-s 'i*

**. GoELICRESANUREAs 0TT0MARUSJ**

Wrote an History of Anatomy, under the Title of *Historia  
Anatomia rtouct esqudde arttiqnad Halae Magdehurgicae,* I7I3»  
*Suo. ;*

\* .\* z - L -\*\* .-c-..v .. Γ . . . . .\* \* . . ... ... "

**? . ; .GRAAF (REGNERUS DE)**

**A** Physician of *Delft in Holland:* He published the follow-  
ing Anatomical Pieces. ' z ?

*: Disputatio Medica, de Natura et yUsu Succi Pancreatice,  
Lugde Batau: ex Officina Hackiandgrisism. in- rzmoA Tracta-  
tus Anatomico-Medicus, de Succi Pancreatici Natura et Usu.  
Accessit Epistola, de Partibus Genitalibus "Mulierum. Lugduni  
Patavorum,* I67i. *in Suo.* ’ itss \

- This Treatise jS in the *Bibliotheca'Anatomica. ’ "*

*s~ De Pirorum Organis Gencrationi inservientibus t de Clysteri-  
bus. t de Usu Siphonis in Anatomia. \ Lugd. Patagi, et Rotero-  
dami, ex Uflicina Hackiana, pri(sS, in2uo. ibidem,* I67O. *in  
-Sua. Ibid: ilenlz.An Suo.*

- This is also in the *-Bibliotheca Anatomica.*

*Epastola de nonnullis circa Parces Genitales Inventis naviis  
LugdeBat.* I668.ffiin I2wo. .- --

*De Mulierum Organis Gencrationi inservientibus, TrActaties  
novus, demonstrans, tam Homines et Animalia scatera omnia,  
qua Vivipara dicuntur, haud minus, quam Ovipara, ab Ovo  
originem ducere. Ibidem ex Officina eadem, i6ji. in Sua.*

This is also in the *Bibliotheca Anatomica. \**

*Defensio Partium Genitalium, Lugd. Eat.* 1673. *in Sara.*

. This is also in the *Bibliotheca Anatarnica.*

*Opera amnia, Lfogdwii Batauorum ac Officina Hachiana^  
tsm.y. in Svo.* -, λ

**Ἄ Two** Diflhetationsealso of this Author are extent in the *Gerti  
man* Ephemerides.'; ohe on -the Indurations ;os the Carotid Axe  
teries ; the other on asmonstrous Uterus. -. τι v - ‘  
. Many new Tilings concerning the respective Subjects he  
heats of, πημό contained inthe Works os This Author-; but he  
is charged with borrowing them from *Pan Hama,* whose Pupil  
he was. \*Tis, however, remarkable, that his Invention os **a**Syringe gaveherrthto all’ **the** Discoveries in.Anatoiny which  
have, since .his .Time, been made hy means oslnjuctions. ’

**; GRAsZCCIUS, (GEORGIUS) ' .. ....**

Of *Scrasuurgh,* publish'd an Anatomical Work "under the  
fallowing.Title:.ss. '00 —' ‘ ss --l. - τ ssss

Μικροκοσμικὸν θεατραὬ *Inestes Fdhricd humant Corporis Muse  
curium repraesentantis. affabre demonstratur, una cum Icone Muse  
culi Homini difficti scorsim expressed.. .Argentorati,.apud Johdn.  
Cdralum,* 16G5.(in 8tto. . . . 6 .: .,

**i GREW sNEHEMIAH) \**

Wrote a comparative Anatomy of the Stomach and Inte-  
stines, which is, J think, published at che End of his Cam-  
*logue of Rarities,* &c. -. - .: .

'' He also wrote many Treatises On the Anatomy of Vegetables.  
Li.?. **: - HALLER (ALBERTUS) . ...**

i Wrote a Treatise, intituled, *sue Musculis Diaploragmaiii  
Dijsiertaiio Anacertica, Bernal,* i733/4to. \* -

r **. ... HAVERS, (CLOP TON) . ..?; :**

. An *Eytglijh* Physician. He wrote admirably well fin the -  
Bones, and made some considerable'Discoveries with'respect to  
the Periosteum, and' the Marrow. He discovered, in every  
Joint,-particular Glandssiout of which issues a mucilaginous  
Substance, whose Nature he examined by numerous Experi-  
inentS, which, with the Marrow supplied by the JBones, always  
serves to oil the Wheels, that so our Joints and Muscles might,  
answer ’those Ends os Motion, .for which Nature designed  
them.. This was a Very useful Discovery, since it has made  
abundance of Things, thatwereobfchre in thet Part of .Anatomy,  
plain, and easy to he understood : And, among other'things. It  
shews the Use of that excellent Oil which is contained in our  
Bones, and there separated, by primer Strainers, from the Mass  
of the Blood; especially, since, by \ rune Examination of the  
true inward Texture of all the Bones and Cartilages of-**the**Body, he sheherth how this Oil is communicated-to the Mu-  
cilage, and *so* united, -as to perform their Office.. . . .  
*'“NovaestesEdam Observationes da Ossibus, Lugd. Batdu.fry,» \_*8yo.. . ... . ; ;

**-sqss ... .HEISTER,.(LAURENTIUS) . . ' „ dur**

. A celebrated Profeflbr at *Hilmsiad,* published a Very valuable  
Piece of Anatomy, intituled. *Compendium Anatomicum, Veterum?  
Recensetorumque Observationes lordvifsirne complectens. Altorsis,  
Tpjc astor. - . - '* ;. ι

*Altorfii et Narinberga,* I7I9. Y72y. and I732. -  
An *Englisu* Transtation Of this Book was published at *Lcn-  
dets, yyspi. - .. ... -*

**HEMSTERHtiTS (Sv.BOLDUS) -- -**

Published some Anatomical Collectioris under the following  
Tide ; τι V ' ; - ‘si ' ' si , -J ’ *^sisiet 'suf.  
so-Messes aurea, feu Collectanea Anatomica, usnttineatiaArium  
PrAstantissimorum Anatoniicerum Opuscula s* i. *fob. Pecqueti  
Experimenta nava Anatomica, st. Thonnez Bartholini de Lacteis  
Thoracicis Historiam Anatomicam, citm eyufdem, de iifdem Du-  
biis : et Fas.orum Lymphaticorum Historiam navam.* 3. *Olat  
Rudbeck, Duct. Hepaticos aqunsos : rasu Glandularum Scrofa:  
Observationes t Epistolas Pariorum Efus.dem de Vasis Lympha-  
ticis Tabulas* I3. *.aeri incisus, Lugduni Batavorum,* I654.- in  
I2rno. *Hiidelbergor,T.ypiis Adrtani Wyngaerden,* T659, in 8Vo..

**HIGHMORE (NATHANAEL)**

-. Published an Anatomical Work under, the Tide of. *Corporis  
heumani Difquisitio Anatomica,* &c. *Haga Comitum,* I65I.  
*Pol. ... ... ‘ .*

- The large Caysty of the tipper Jaw is called from him, Ansa  
*trum Highrnorianum* ; but he is not the first Describer of if Y for  
CoserherIakesNotice oftt under the'Name *cis Antrum Gena.*

**HOBOKEN, (NICOL AUS) 'si- ’ \**

*Ά. French* .Author, publish'd, according to *Goelic.be,* a Treae  
'she on the Method of dissecting, *in French.* His other Anar  
toinieal Works are,*' Anasomia Secundinae humana, quindecim  
Figuris ad vivum propria Auctoris manu delineatis sliusiratafCum annexo 'Spicilegio Epistolarum, rem poti/simum generatoriam  
yriferentium. Trajecti ad Rhenum, apud Johant Ribbium, tLsm.*.inEVo. *Jbidem,* l.6y2. in 8Vo. ' . . . . . ....

*Cognitio Physiologica Medica, accuratijstmd et dlarifsimd Me\**I *ihddo tradita. Ultrajecti apud Henric. Verstcrgh,* I67o. in.4I4.  
*ibidem apud foh annem scande Water,* **IS8.5\*.** inchths . .

*anatomica Secundinae humana repetita, Aucta, roborata, et  
'quadraginta quatuor Figuris, propria Auctoris manu delineatis,  
insuper illustrata i quae praeter novistime observatam Naturam ac  
Constitutionem univerfa Secundinae illius, ac partium Jingularurn  
ustum quaque et utilitatem decet. Praemittuntur Liter a D. Hen-  
rici Eussenii cum Auctoris Rofpcmstmibus. Did. apnd Job. Rib.  
Hum,* I675. in Svo. . . .

r *Anatornia Secundinae Vitulina,\* triginta octo Figuris, propria  
Auctoris mana delineatis, illastrata: Ultrajecti, . apiid Johcrn.  
Pibbium, i6Th.* in Svo.

**HOFFMAN, (JOHANNES MAURITIUS)**

Professor of Physic in the University of *Altorof,* published an  
Anatomical Work under the Tide of,

*- Dissertationes. Anatornico-Physalogicae. ad Viri Claristimi,  
Johannes Van Harrte, in Dniveesitate Lugduno . Batav. Professe  
quondam Aeleritissemi, Microcojmurn, Aonstatae,. Observationibus  
et Experimentis Anatomicis recentiaribus variis illustrata. Alt.,  
derssei, apud Hinricum Mayerum,* I680. in 4.o.

**. . HORNE (JOHANNES VAN)**

Was Professor of Anatomy at *Leyden.* His Anatomical  
Pieces hear a very good Character. He has the Reputation of  
having discovered the Thoracic Ducts and is said to he the first  
Sho was acquainted with the true Structirre of the Testicles.

e also gave the Name *of Ovaria* to what was before called  
the *Testes os* Females. *De Graaf* is faid to be much obliged  
to him for the Discoveries he has published with Iefpecti to the  
Parts of.Generation. His Works are,

*Novus Ductus Chyliserus, nunc primum delineator, defers,  
plum, et Eruditorum Examine expesitus, Lugduni Batav. apud  
Francs Hackiurn,* I652.. in 4to. .

λίικρακοσμος. *foul brevis Marniductia ad Historiam Corporis  
humani: in Gratiam Discipularum edita, Lugduni Batavorum,  
apnd Jac. Chovet,* I66O. in I2mo. *Ibidem, apnd eundem,*I662. in I2mo. *Ibidem, apnd eundem,* I663. in I2mo. *Acipsta  
‘apnd Jihatmem Fritsehiurn,* I675. in Iamo.

*Leonhardi Botalli Opera omnia, Lugduni Batav. apud Daniel,  
et Abradi, a Gaasteeck,* I 660. in Svo.

*Prodromus Observationum suarum circa Partes Genitales in  
utroque sexu. Eugii. Batavi* **I668. in Iamo.**

*Observationes Anatomico-Medica, Acoflelsdami, apnd Atrah.  
Igrdffgulsc,* 1674. in Iamo.

**. crHORSTIUs, (JOHANNEs.DANIEL) . .**

Professor *sa. Marpurg,* was Anther of the following Aurato.

Snical Pieces: - '" . - - -

*Decas Observationum et Epistolarum Anatomicarum, quibus  
sengularia seitu digna. Lactearum nempe Thoracicarum et Vase-  
rim Lymphaticorum natura, Embryonifque per os nutritio, atque  
alia rariora exponuntur. Francof. apnd Wolhelmum Serlintini et  
Gecrg. Fickwirthum,* I656. in uro.

*Anatorne Corporis humani. Tabulis comprehensa. - Moarpurgi,  
apnd Chernlinum,* I639. in 4to. . .

**iacedsinss** ϊ:**- Hovltrs (JACOBUS) .**

Advances, thet the Humours of the Eye are perpetually  
wasting, and as perpetually replenished by the Vessels which  
terminate in the Eye. Thet the aqueous Humour may waste,  
and be restored, is certain; but it is not evident, thet the  
other Humours of the Eye are in the same State;, though  
indeed it should seem necessary for the maintaining their  
perpetual Transparency and Lustre. . I have only seen one Edi-  
tion of his Book, which is intituled, *Tractatus de circulari Hie.,  
merum Metu in Oculis, Lugduni Batavorum,* I740. Svo. *cum  
Figures. -*

**KEILL (JAMES) ss .**

- Was a Native of *Scotland*he read Lectiires in Anatomy  
at *Oxford,* and afterwards practised Physic with great Reputa-  
tion at *Northampton,* where ,he died of a Cancer in his Mouth,  
much regretted. ,

*.. His Anatomy of the human Body abridged* is deservedly in  
great Esteem, of which there have been a great many Editions  
printed at *Landon.* He wrote also some other Treatises relating  
to Physic:

**.. ... KERKRINGIUS (J0HANNES THEODORVSJ**

Wrote the following Anatomical Pieces: I

*Specilegium Anatomicum, contineus Observationum Anatomica,  
mum rariorum Centuriam unam; necnon Osteogeniam Faetuumy  
in.que,. quid cuique ojstcule stngulis accedat menfibus, quidque  
Accedat, so in eo per varia immutetur tempera, accuratisseme ocu-  
lis sabjicitur. Arasteledarni, apnd Andr. Pristurn,* I67c. in 4 to.  
*Abide* 4to.

*., Antbropogenia Ichnographies, seve Cossforrnatia Fatus ab Ove  
rydur ad Qjscficacionis principia, in Supplementum Oestesgeniae  
-Fotuum, cum- Figures. Ibidem, apnd Andri Frifsusn,* **I67o.**

-in4.to.-S:. , -

This isin the *Bibliotheca Anatcrriica. '*

His *Cestesgenia Fatuum* -is also *in'the Bibliotheca Acutis,  
mica. . .*

**KULMUs (Jo. ADAMAS)**

Published an Anatomical Work, intituled. *Tabulae Anate.,  
mica, in~quibusCorporis humani, ormiianque ejus.Partium Stru-  
ctura et Usus brdurlsane.explicantur,* &c. *Amstelod.* I732. and  
*us French, ibid.* **I734.8vo.-r.. ..** . r \*. -s'

**LAuctsI (J. MARIA)**

Wrote a Treatise *De Motu Cordis et Aneurifmatibus,* which  
was printed at *Berne,* and afterwards at *Leyden,* I740.

*Litncifii Opera omnia, Genet).* I7I8.

He also published *Eastachiurs* Tables.

**, . - . LEALIs (LEAL) .**

In an Epistle to *Dominicus de Marchettis,* has several Dis-  
coveries relating to the Spermatic Arteries and Veins, and in  
the Structure of the Vesicuhe Seminales. \

**' LEEUWENHOEK (ANTONY VAN)**

Has obliged the World with a great many Discoveries relative  
to Anatomy, particularly by means of his Microscopes. Inis  
not possible to give the Particulars of them, unless I was to  
transcrihe his Works. Many detached Pieces of this Anther’s  
were published at different nines, but his entire Works were  
painted *Lugd. Batav.* I722.

This Author has made evident the Anastomoses of the Arte-  
ries with the Veins, and discovered a prodigious Number of  
Animalcule in the Sperm of Male Animals; hut the System of  
Generation, hence deduced, has the Appearance of being utterly  
salse, as is shewn under the proper Article.

**LISTER, (MARTIN)**

In an Epistle to *Hinry Oldenburgh,* has some Particularities  
relating to the intestinum Ccecum.

.5 LowER **(RICHARD) Γ**

Wrote an excellent Treatise on the Heart, wherein he ad-  
vances several things which are new, with respeol to the spiral  
Order of the Fibres which compose this Part. There are seve-  
ral Editions of this Work: These I have feen are, . i

*Arnjielndami,* **1669.** *Londini,* **I67O. ’ .**

*Manges and LcClerc* heve also sprinted stain their *Bibliotheca.  
Anatomica. ”,* **'. . i**

**. , ,'s. .4.’f st LYSERUS, (MICHAEL) --**

Of *Lieipstc,* was a Pupll; and Favourite of *Thomas Bartha.,  
line,* and by his Friendship and Instructions hecame a very dex-  
terous Anatomist. j -

The only Anatomical Work he published, is intituled. *Culter  
Anatomicus,* which contains excellent Instructions sor dissecting  
Bodies with Dexterity : Of this there -have been many Edi-  
tions, as ' - . \ ’ 1 ’ ’ T - -

*Hafneae, 1653.* **8vo. I665. 8vo.**

*. Franeofurti,* **I679. 8vo. \_ : ' ... '**

*. Lugduni Batav.* **I73I. " .**

in this last Edition are contained, his *Observationes AAedica ,  
the Observationes Medico.Chirurgica Hinrici a Miinichen.,* and  
the *Ohfervationes Anaterniccl-Chirurgica Moirtini Bogdani.*

**MALPIGHIUs (MARCELLUS). ; \_**

This Author flourished in the last Century, and was deserved-.  
ly celebrated for his great Skill, and singular Sagacity, in Ana-  
tomical Researches. His Industry was not: confined to the more  
persist Animals, bur was extended to Infects, and even to Ve-  
getables, to the great Improvement of natural Knowledge, and  
to his own Honout. He was a Memher of the Royal So-  
**clery .**

Amongst other Discoveries, he found by his Microscopes,  
thet the Cortical Part of the Brain consists of an innumerable  
Company of very fmall Glandules, which are'all supplied with  
Blood by Capillary Arteries ; and that the Animal Spirit, which  
is separated from the Mass of the Blood in these Glandules, is  
carried from them into ? the Medulia Oblongata,' through little  
Piper, whereof one belongs to every Giand,L whose other,End  
is inserted into the. Medulla Oblongata, and that thesenum-  
herlefs Pipes, which, in the Brain of some pishes, look like  
the Teeth of a small Ivory Comb, are properlythat which all  
Anatomists after *Piccolhondnus* have called the *Corpus Callosum,*or *The medullar Pare of the Brdin.* - X

Before his Time, theTextine of theTongue was but guefs’d  
at, which occasioned great Disputes concerning the Nature of  
its Substance, some thinking it robe glandulous, some muscu-  
lar, and some of a peculiar Nature, , not to be matched in any  
other Part of the Body. This therefore *Malpigulus* examined  
with bis Glasses, - and discovered, that it was cioathed with a  
double Membrane; thet in the inner Membrane there are  
abundance of small Papilhe, which have Extremities of Nerves

inserted into them, by which the Tongue discerns Tastes, and  
that under this Membrane it is of a muscular Nature, con-  
sisting of numberless Heaps of Fibres, which run all manner Of  
wavs, over one another, like a Mat.

The Lungs, as most of the other Viscera, were believed to  
he of a parenchymoles Substance, till *Malpighi* sound by his  
Glasses, that they consist of innumerable small Bladders, that  
open into each other, as far as the outermost, which are cover-  
-ed by the outer Membrane, - that incloses the whole Body of  
the Lungs; and that the final! Branches of the Wind-pipe are  
all inserted into these Bladders ; about every one of which, the  
Veins and Arteries are entwined, in an inconceivable Number  
of Nets and Maaes, thet the inspir’d Air may profs Upon, or.mix with, the Mass of Blood, in such small Parceis as the An-  
tionts had no Notion of

Till *Malpighi* discovered the Texture of the Liver by  
his Glasses, its Nature- was very obscure. Butsie has found  
out, that the Substance of the Liveris framed of innumerable  
Lobules, which are very often of a cubical Figure, and consist  
of several little Glands, like'the Stones of Raisins, so that they  
look like Bunches of Grapes, and are leach of them cloathed  
with a distinct Membrane ., that rhe whole Bulk of the Liver  
consists of these Grape-stone-] ike Glands, and of divers Sorts  
of Vessels ; that the sinall Branches of the Cava, Porta, and  
Torus Bilamis, run through all, even the least of these Lo-  
bules, in an equal Number; and that the Branches of the  
Porta are as Arteries that convey the- Blood to, and rhe  
Branches of the Cava, are the Veins which carry the Bleed  
from, all thefe little Grape-stone-like Glands. From whence it  
is plain, that the Liver is a glandulous Body 'with its proper  
excretory Vessels, which convey away the Gall, that lay before  
in the Mass of Blood.

He also discovered, that the Substance of the Spleen deducting  
the numerous Blood-vessels and Nerves, as also the Fibres  
which arise from its second Membrane, and which support the  
other Parts,, is made up of innumerable little Cells, like Honey-  
combs, in which there are vast Numbers of small Glandules,  
which refeinble Bunches of Grapes ; and that these heng upon  
the Fibres, and are fed by Twigs of Arteries and Nenes, and '  
send forth the Blood there purged, into the Ramus Splenicus,  
which carries it into the Liver ; to whet Purpose, is not yet  
certainly discovered.

The Mechanism of the Rains was wholly unknown till  
*Malpighi* found it out. He by his Glasses discovered, that  
rhe Kidneys are not one uniform Substance, but consist of  
several small Globules, which are all like so manyfeveral Kid-  
neys, bound about with one common Membrane; and that  
every Globule has small Twigs from the emulgent Arteries,  
that carry Flood‘to it 4. Glands, in which the Urine is strained  
from it; Veins, by which the purified Blond is carried off to  
the emulgent Veins, thence to go into the Cava; a Pipe, to  
convey the Urine into the great Basin in the Middle of the  
Kidney; and a Nipple, towards which'several of those final!  
Pipes tend, and through which the Urine ouses out os them  
into the Basin. This clear Account of the Structure of the  
Reins has esseolually confuted several Notions, that Men hail  
entertained, of fome secondary Uses of those Parts; since  
hereby it appears, that every Part of the Kidneys is immedi-  
ately and wholly subservient to that single Work of freeing the  
Blood from its superfluous Serum, and Salt.

He also made, some Observations concerning the lymphatic  
Vessels and the Glands, which are new.

His Works are, his *Observationes Anatomicae de Pulmonibus,*printed along with *Bartholini -de Pulmonum Substantia et Motu  
Diatribe: Hapria,'* I663. *sugi. Bat.* I672. *Dissertatio  
Epistolica de Bombyce, Loneliest,* I 669. , *De Viseerunt, nomi-  
narim Pulmenurn, Hepatis, etc. Structura, Amestelod.* 1669.  
*Jenae, sdury.* They are also in *Li Clerc* and *lldangetus’s Bib-  
netheca Anatomica* printed *Geneva,* 1685. *Epistolae Anatomicae,  
ib.* 1669. and in *Li Clerc* and *llAangeturs Biblioth. Anatomica,*printed *Geneva,-*I685. , *Anatcme Plantarum, Lind.* I675.  
*Afiatbmes 'Plantasum Pars altera, ibid. sprig. Dissertatio  
Epistolica da Forrnatisne Pulli in Ovo, Lind.* I666. It is also  
in the *Biblioth. Anatomica* of *Le Clerc* and *Mangetus,* printed  
*Geneva,* I6S5. in which are likewise contained his Disserta-  
’ tions *De Cornuum Vegetatione : De Utero, et Viviparorum  
Ovis, et de Pulmonibus Epistolae : His Dissertatio de Polypo  
Cordes. Epistolae quaedam circa illam de Ovo Dissertationem,*&c. *Appendix repetitas auctajqui de Ovo incubato Observationes  
continens. - - -*

**MANGETUS (JOHANNES JACOSUs)**

Was a Physician at *Geneva,* and, together with *Daniel le  
Clerc,* publish’d the *Bibliotheca Acatornica, Genev.* I685.

\* This was also reprinted at *Geneva,* I7I7.

In this Collection the following Treatises are contained :

*Franeifci Glijsconii 'Aractatus de Partibus . continentibus in  
genere, et in specie Abdominis.*

*Marcelli Malpiguli de Externa Foetus Organs Exercitatio  
Epistolica.*

*Marcelli FAalpiguli de Cornuum Vegetatione Dissertatio  
Epistolica.*

*Francisse Glijscmii Continuatio Tractatus de Partibus Continen-  
tibus in (senere, et in Specie de iis Abdominis.*

*Marcelli Malpiguli Exercitatio de Omento, Pinguedine, et  
ddipojis Ductibus.*

*Francisei Glissenii Tractatus de Ventricula et Intestinis.*

*Tbomae Wollis Primarum Viarum Descriptio.*

*Johannis Conradi Exercitatio Anatomica Medica prima de  
Glandulis Intestinorum.*

*Johannes Conradi Anatome Ventricule Gallinacei.*

*Johannis Conradi Exercitatio secunda de Glandulis Intesti-  
norum.*

*Eiufdem Certamen Epistolare de Glandulis Intestinorum cum  
Joh. de Muralts.*

*Excerpta ex joh. Nicol. Pechlini de Exercitatione et purgan..  
tiurn Medicamentorum Operationibus.*

*Excerpta ex johant Jac. Wepfcro de Glandulis Ventriculi.*

*Clestificationis Historia ex Variis. -*

*Thomas lVhartsnus de Mesenterio e Tractatu de Glandulis.*

*Pjgriori de Graaf Tractatus Anatomico-stAedicus, de Succi  
pancreatici Natura et Usu.*

*johan. Conridi Brumeri Experimenta Nava circa Pancreas.*

*Francisei Glijsenei Anatomia Hiepatis.*

*Marcelli Malpighis Exercitatio de Hepate.*

*lAarcelli Malpiguli Exercitatio de Liene.*

*GlandularumRenalium, seu Penum Succenturiatarum, Historia****ex*** *Variis.*

*Laurentii Bellini Exercitatis Anatomica de Structura et*

*Usu Penum. \**

*Marcelli Malpighii Exercitatio de Renibus.*

*Regneri de Graaf de utriufque Sexus Organis Generationi in..’  
servientibus Tractatus duo.*

*Nicolai Stemnis Observationes Anatomica spectantes Ova vivi-  
pararum.*

*Johannes Swammerdam Miraculum Naturae, jive Cetere Muli.,  
ebris Fabrica.*

*Regneri de Graaf Partium genitalium Defensu.*

*Caspari Bartholini Tkomae Filii Hafniae Prosesseris Anatornei  
de Ovariis Mulierum, et Generationis Historia, Epistolae duae.*

*MarcelliMalpigulideUtero, et ViviparorumOvis,DiJscrtatia.*

*Gualtheri Needham Difquisttio Acatornica, de formato Forne.*

*Marcelli Alalpighii Discertatio Epistolica de Formatione Pulli  
in Ovo.*

*Epistolae quaedam, circa hanc de ονο Dissertationem, aliqua* ***ex****Occastone, sub nata Argumenta ultro citroque scripta.*

*Marcelli Malpighii Appendix, repetitas auctafque de Ovo incu-  
bato Observationes continens.*

*Guliclmi Harvei Exercitationes de Generatione Animalium.*

*Theodori Andes, seu potius Matthaei Slads Amsteladarneasts,  
Dissertatio Epistolica contra Gulielmum Harveum, tribus Obser-  
vationibus Anatomicis ia Vitulis et Vaccino Utero factis, auctior  
reddita.*

*Theodori Aides Observationes in Ovis instituta, Ac.* **I668.** *iri  
Variis Incubationis Diebus.*

*Frederici Ruysehii observaliuncuia de Ovo in Utero humano  
reperto.*

*Theodori Aides Sciographia Nutritionis Pulli in Ονο Foetus  
vaccini in Utero, ut et Foetus humani in Utero fuo, et de  
Urina.*

*Caroli Drslingcurtii de Conceptu Conceptus.*

*Carolus Dreliagcurtius de Semine Virili, item de Semine Mu-  
liebri, Ovis, Utera, Tubis Uteri, cum Corollariis de Fcetu  
humaro.*

In the second Torne are contained the following Treatises:

*Caspari Bartholini Thomae Filii Diaphragmatis Structura  
Nava.*

*De- Mammis, et Lactis Secretione.*

*Gulielrni Harvei Exercitatio Acatornica de Motu Cardis et  
Sangulnis.*

*Exercitationes Anatomica dua de Circulatione Sanguinis ad  
J. Riolanurn, J. Filium.*

*Richardi Lower Tractatus de Corde, item de Mata et Calore  
Sanguinis, et Chyli ia eum Transttu.*

*Nicolai Stmonis Observationes circa Motum Cordis, ejufque  
Auricularum, et Venae Cava, excerpta a variaram Animalium  
Sectionibus, hinc inde sactis.*

*Marcelli Malpiguli de Polypo Cordis Dissertatio.*

*Marcelli Malpighii de Pulmonibus Epistolae duae. ,, -- -  
Thomae Wollis de Respirationis Organis et Ufu Dissertatio.*

*Johannis Swammerdami Tractatus Phystco.Anatomico-Medi-c  
cus de Respiratione, Vsuque Pulmonum.*

*Malachiae Thrusean de Respirationis Usu primario Diatriba.*

*Georgia Entii Antidiatriba, seue Animadverse.ones in Malachia  
Thraston Diatribam de Respirationis Ufu primaria, cum Kefpon..  
stonebus et Instantiis.*

*Johannis Maycw Tractatus de Respiratione.*

*Eiufdem Tractatus de Respiratione Foetus in Utero et Ovo.*

*Thoma Wollis Cerebri Ar.atome.*

-l

*.AAarcelli ZAalpighii Exercitatio Epistolica-de-Cerebro.*

*Caroli Fracojsa'i Dissertatio Epistolica responsoria de Cerebra.*

*-Marcelli stlalpiguli de Cerebri Cortice Dissertatio.*

*Naicslai Stemnis de Cerebri Anatone Dissertatio.*

*Hiicslai Stenonis de Vitule Hiydrocephala Epistola.*

*Joannes Jac. lVepsferi de Puella sene Cerebra Nata Historia.*

*Th cudere Rerckringii de Ovibus aliquot et Puero Cerebro caren-  
dibus, etc. -*

*Guliclmi Briggs Cphthalmographia.*

*Joannes Baptist Verle Anatomia Artificialis Oculi.*

*Guntheri Christ. Schslhamrneri de Auditu Tractatus.*

*Jascbhi de yerniy de Auditus Organo Tractatus.*

*" AAarcelli Malpighii Exercitatio Epistolica de Lingua.*

*Laurentii Bellini Castus Organum novisseme deprehensam.*

*ν " Theodori Rerckringii Anthropsgeniae Ichnographia.*

*Theodori Rerckringii (asteogenia Poetuurn.*

*.Nicolai Stenonis de Masculis Observationum Specimen.*

*Nacclai Stenonis Elementorum Mgulogra Specimen.*

*Thomae WilHs Exercitatio Medico-phesica de Motu Musculari.*

*Joannes Mascvj Tractatus de Motu Museuiari, et Spiritibus  
Animalibus; obiter de Motu Cerebri, necrson de Usu Lienis et  
Pancreatis.*

*Caroli Spurii -Mgulogia heroico Carmine expresse.*

*-Caroli Spodii Musculorum Microcofmi Origo et Insertio.*

*Thomae s-Villis Nemorum Descriptio et Usus.*

*Thomae lVillis Arteria Descriptio Anatomica.*

*Caspar's Asesui licir.mscs Historia Vascorum.Chyli.*

*~J. Pecquefi Diepeasts Experimenta Neva Anatosriica circa  
.Lactearum Progresseum. ...*

*Thomae Bartholini Archiatri Regii, et' Hasuieasts Academiae  
Profejseris Honorarii, de Lacteis thoracicis Historia Anatomica.*

*Thama Bartholini de Lacteis thoracicis Dubia Anatomica.*

*~' Caroli Drelirgcurtii Experimenta Anatomica ex Vivorum Secti-  
jmibus pe.ita. ...*

*Thoma Barths line Vaserum Lymphaticorum Historia Nova.*

*Olai Rulbecbi Succi Nova Exercitatio Anatomica, exhibens  
Ductus hepaticis, aquascs, et Vasa Glandularum serofa.-*

*Frederici Ruyfch Dilucidatis Valvularum in Vasa Lymphaticis  
et Lacteis,*

*Guntheri Christ. Schelhammeri de Lymphae Ortu, et Lympha-  
ticorum Caujis, Dissertatio Epistolica.*

*Thema lVhartoni Adenographia.*

*Nicolai Stenonis Observationes Anatomica de Glandulis Oris,  
set Novis inde prodeuntibus Saliva Vafis.*

*Nicolai Stenonis de Glandulis Oculorum, novifque earundem  
Vasa.*

*Ejuselern Appendix Ac Narium Vascis.*

*- Nicolai Stenonis de Glandulis Tractatus.*

*Gulielmi Cole de Secretione Animali Cogitata.*

*. Johannes Alphonse Bonelli de Motu Animalium Opuspesthurnum.  
Michaelis Lyseri Culter Anatomicus.*

*Simonis Pauli Dani Modus dealbandi Djsa pro seeletopaeia.*

*Ejufdem Observationes in Coctura Osseum, praesertim Sterni.*

*Cafpari Bartholine Thoma Filii Administratiinum Anatomica..  
rum Specimen.*

*Josephi ibnmbeccari Experimenta circa Diversa e Variis Ani.  
molibus viventibus exsecta Viscera.*

**-MARCHETTIS (DOMINICUS DE)**

- ’Succeeded *Veflingius* as Professor of Anatomy at *Padaa.* At  
the fame Place lived *Petrus de Marchettis,* who.applied himself  
to Surgery.

The Works of both are in good Esteem. That of *Domini-  
cus de Marchettis su Anatomia, cui Responsantes ad Riolanum  
Anatomicum Purifiensun in ipseus Animadversionibus contra Vejlin-  
gium additae sunt, Patavii, tfs^.cibide* 1654. *Hardervici,* I656.  
together with *Petri de Marthetcis Nava Observatio, et Curatio  
Chirurgica.*

**MAYow, (JoHN) ’ "**

A Physician of Oascof, Fellow of *All Souls* College, and  
potior of Laws, wrorc the following Anatomical Treatises :

*Tractatus Quinque Medico-phyflci,* printed *Oxemii,* I669.  
*ibid.* I674. *Haga Comitis,* I68I. There Treatises, except the  
first and the last, are in the *Bilolioth. Anatom,* of *Mangetus* and  
*Le Clerc,* printed *Genev.* 1685. *Tractatus duo seorsum editi,  
quorum prior agit de Respiratione, alter de Rachitide, Oxonii,*2.609. *Lugd. Batav.* r 6y r.

**’ .MErBoMIUS (HENRIcus)**

Discovered some Vessels .of rhe Eye-lids, which had not  
.been taken Notice of-before. These he gives an Account of  
in an Epistle, intituled. *De Vasts Palpebrarum Navis Epistola  
Lir. Clar. lypelem Langeln, Hilmestadii,* I666. *De Medicorum  
Historia scribenda Epistola ua V. a. Georg. Hieronym. Velse  
chiam, Hiisastad.* I669.

**MOLrNETTuS, (ANTONIUS)**

Α Physician and Anatomist of *Padua,* **was Author of thc fo]\_**loving treatifes-

*Dijscriationes Anatomica et Pathologica de Seasthus, et eorum  
Organis, Patavii,* I669. *Dissertationes Anatomica-pathclogicae,  
etc. Vinetiis, I&jζ.*

**MoNRO, (ALEXANDER)**

A celebrated Professor of-Anatomy, at *Edinburgh,* Author  
of an Osteology, which is in much Esteem. I don’t know,  
that he has published any thing else, except some Pieces in the  
*Medical Ejscays.* The second Edition of this Osteology was  
printed *Edinburgh, TVAep.*

**MoRGAGNI (JOHANNES** Baptista)

Was hem at *Forst* in the Ecclesiastical State, and was Pro-  
sessor of Anatomy at *Bologna.* He made considerable Disco-  
veries in Anatomy, relatiog to the Muscles of the Os Hyoides,  
Uvula, and Pharynx, to the Tongue, and Epiglottis; to the  
Arytenoide Glands; to the Sebaceous Glands ; to the Bladder,  
Uterus,- Vagina, and Breasts.

His Works are,

*Adversaria Anatomica,* which were collectsd and printed at  
*Leyden,* I723. 4ιο. . ,

*Epistolae Anatomica dua, Eugduri. Bat.* I728. 4.ο.

**MuRALTO (JOHANNEs** de)

Was of *Zurich,* where he was Professor of Physic. He  
wrote various Essays on the Anatomy of Fish, Insects, and  
other medicinal Subjects, which are extant in the *German  
Ephemerides.*

Besides these, he publish'd a Book, intituled, *Vade Mecum  
Anatomicum, sute Clavis Medicina,* printed *liguri* I 677.

**NEEDHAM, (WALTEIr)**

An *Englisa* Physician of the last Century, gave a good Ac-  
count of the Membranes which involve the Foetus, in bis Book  
*De Formatu Fatus, Londini,* I667. 8vo. *Amestelodami,-ttsoS.*I2mo. .

**NICHOLLS** (DI. FRANcIs).

I doh\*t know, that this Gentleman has published any thing  
in Anatomy, except his *Compendium Anatcmico-Oeconomicum,.*and some Essays in the Philosophical Transactions. But his  
uncommon Application to this Science, and his singular Saga-  
city in Anatomical Researches, make is hoped, that ho will  
some timeobllge the .World with an Account of his Discoveries.  
The Editors of the *Edinburgh* Medical Eflays somewhere ob-  
serve, thet *Albinus* had rnjectsd the Vessels of the Coat of the  
Crystalline Humour of the Eye, and seem to think it a new  
Discovery: On this Occasion I cannot forbear taking Notice,  
that I heve seen *Ds. Nicholls* injeol these Vessels sixteen Years  
ago.

**NUCK, (ANTONY)**

A *Dutch* Physician, first practised his Profession at the  
*Hague,* and afterwards was Professor of Anatomy at *Leyden.*He was a most experienced and indefatigable Anatomist, having  
disseised with his own Hands, in the Space of eight.Years, up-  
wards of sixty human Subjects.

The way how the watry Humour of the Eye, when by Ac-  
cident lost, may be, and is constantly supplied, was first found  
out and described by *Nack,* who discovered a particular Canal  
arising from the internal Carotid Artery, which, creeping along  
the Sclerotic Coat of the Eye, perforates the Cornea near the  
Pupil, and then branching itself cunousty about the Iris, enters  
into, and supplies the aqueous Humour.

He alfo discovered fome Salival Glands, not mentioned by  
*Wharton, Steno, Bartholine,* or *Rivinus.*

He says, that the Breasts are Heaps of Glands, supplied with  
Blond by innumerable Ramifications of the Axillary and Tho-  
racic Arteries; some *of which, passing* through the Breast-bone,  
unite with the Vessels of the opposite Side. Thefe Arteries,  
which are inconceivably finall, part with the Milk in those  
small Glands into small Pipes, four or five of which, meeting  
together, make one- finall Trunk. Of these smallTrunks, the  
large Pipes, which terminato in rhe Nipple, are made up; tho\*.  
before they arrive thither, they streighten into so finall a Com-  
pass, that a stiff Hair will just pass through. The Nipple,  
which is a fibrous Body, has seven or eight, or more Holes,  
through which every Pipe emits its Milk upon Suction ., and  
**lest,** any one of them being stopp’d, the Mllk should stagnate,  
they all have crost Passages into each other, at the Bottom of  
the Nipple, where it joins to the Breast.

He says, thet the Lympheducts arise immediately from the  
Arteries,. and that many of them pass through the Conglobato  
Glands, that are dispersed in the Abdomen and Thorax, in  
their Way to the Receptacle of theChyle, or thofe Veins which  
receive them.

His Works, which I have seen, are, *Adenograpiia, Sialogra-  
phia, et Operationes et Experimenta Chirurgica,* in three fmall  
Vols. primed *Lugd.* I722.

**PALEYN, (JOHN)**

Α Surgeon of *Ghent,* wrote a Book intituled, *Anatomie Chi-  
rurgtcale, ou Deseripiion exacte des Parties du Corps humain,*printed *a Parti,* I734. SVo. 2 Vois. and another, intituled.  
*Description Anatortique des Parties de la Femme, qui fervent a  
la Generation, avec une Traite des Monstres, aLeide,* I78c. His  
*Nauvclle Osteologie, See. Parti,* I73I. I2mo.

**PASCHIoNI, (ANTONIUS)**

An *Italian* Physician, wrote a Treatise about the Dura Mater,  
which he dedicates to *Lancisi*; in this he describes some Con-  
glchate Glands about the longitudinal Sinus, which had been -  
overlooked by *Nack* and *Malpighi. .*

**PASCOLUS, (ALEXANDER)**

A Physician of *Peruse,* in *Italy,* wrote a Book, intituled.  
*Corporis humani brevis Historia,* which is printed in *Italian* at  
*Venice,* I727. 8Vo. 3 Vois. and at *Rome,* I think, in *Latin,*I728. 8vo. 3Vols. .

**PAULI (S1M0N)**

Was hern at *Postoch* in I6O3. In I632. he was made Pro-  
fessor of Physic at the Place of ins Birth, in 1639. he was  
. constituted Professor of Anatomy, Surgery, and Botany, at  
*Copenhagen:* And in I656. Physician to the -King os *Den-  
mark. . .*

He is Author os a great many Treatises ; but his Anatomical  
Works are. *Methodus dealbandi Os.su pro Sceletopceia.*

*- Observationes in Coctura Ojsium, prasertirn Sterni.* Both  
which are in the *Bibliotheca Anatomica.*

**PEQUET, (JOHANNES)**

Of *Diepe,* an Author of the last Century, rendered his  
Name famous by his Discovery of the Receptacle of the Chyle;  
winch, however, it is said, *Bartholomaus Eustacbius* was ac-  
quainted with before him. But the World is obliged to *Pequet*for shewing, beyond all Contradiction, that the Lacteal Vesseis  
convey the Chyle to this Receptacle ; and for proving, that it  
is thence carried, by particular Vesseis, through the Thorax,  
almost as high as the Left Shoulder, and there thrown into the  
Left Subclavian Vein, and so directly carried to the Heart. His  
Works are. *Experimenta nova Anatomica,* printed *Hardervici,*T65I. *Parisiis,* I654. To this Edition there is added, *Desser-  
tatio de Thoracicis Lacteis,* &c. &c. *Amstelodarti,* I66I. T hey  
are also extant with the *Messis Aurea Sibolde Hiemsterhuis, Lugd.  
Balau. Hiildebcrgee,* I 659. also in the *Bibliotheca Anatom.*of *Le Clerc* and *Mangetus, Genov.* 1685. and with most Edi-  
tions of the *Anatornia Reformata Thoma Bartholini.*

**PETIT (JEAN LOUIS)**

Is Author of a Book, intituled, *Traite des Maladies des Os,*of which there have been many Editions ; the last was printed  
*Paris, tsp testes*

**- PEYER, (JOHANNES CONRADUSJ '**

A Native of *Schaffhausen, in Switzerland.* He is famous  
for having first given an accurate Account of the Intestinal  
.Glands, which, in a State of Health, separate a Fluid for the  
Lubrication of the Intestines, and which in Diarrhoeas, or  
upon taking a Purge, supply the extraordinary Discharge, which  
.happens upon these Occasions. His Works are. *Exercitatio  
Anatomico-medica de Glandulis Intestinorum, Schafhufa,* 1677.  
*Acnsielodam.* I682. This is in the *Biblioth. Anatom,* os *Mangetus  
Le CUrc. Pceonts et Pythagoree Exercitationes Anatomica, Basil.*2682- *Methodus Historiarum Anatomida-medicarum,* &c. Isiyo.  
*Parerga Anatomica et Medica, Amstelodarti,* I682.. *Expersu  
.menta Nova circa Pancreas,* extant with the *Biblioth. Anatomica*Of *Le CUrc* and *Mangetus.*

**PLEMPIUs, (VOPISCUS FORTUNATUS)**

Of *Amsterdam,* was famous for giving a good Description of  
the Eye, in a Treatise, intituled, *Ophthalmographia, sivc Tracta-  
Aus. de Oculi Fabrica, Actione, Vsu, &cc. Amstelodam.* I632.  
*Lovanii,* I648.

**RIDLEY (HENRY)**

~ Was Fellow of the College os Physicians; and, at the latter  
End of. the last Century, published a Treatise on the Brain, in  
which he makes some Observations, which had escaped the  
Notice of *lVillis* and *Vieussens.* His Book is intituled. *The  
Anatomy of the Brain, containing its Mechanism and Physiology,  
together with some new D iscoveries, and Corrections of modern  
Authors, upon that Subject; to "luhich is annexed, a particular  
Account of Animal Functions, and Muscular Motion, illustrated  
rvith Sculptures, London,* printed, 1695.

**ROLEINCKINS (GUERNERUS)**

Was born at *Hamburg,* in *1590.* and was Professor of Anatomy  
at *Jona,* in 1629. He wrote the following Books upon Ana-  
tomical Subjects : *Dissertationes Anatomica,* printed *Noriberga,*I656i *Disiertaiio de Hepaie, fence,* 1653. *Dessert also de Corde,  
ibid..* 16 μ.

**RUDBECKIUS, (OLAUs)**

Of *Ups.al,* in *Sweden,* had a great Diipute with *Thomas Bar\*  
tholine,* about the Discovery of the Lymphatic Ducts, to which  
both laid Claim. It is certain, that Dr. *follessee,* in *England,*remarked these Vesseis much about the Time, or something be-  
fore, these Antagonists observed them ; and I see no Reason why  
all three may not equally pretend to the Glory of the Discovery,  
smce, 'tis probable, neither of them took the Hint from either  
of the other. His Works are. *Exercitatio nova Anatomica, &C.  
printed Arosia,* 1653. *Lugd. Batau.* I654. It is also printed with  
the *Messes Aurea* of *Siboldus Hempsterbuis,' Hiildebcrgee,* 1659«  
and with the *Biblioth. Anatomica* of *Le Clcrc* and *Mangetus,  
Genevae,* 1685. *.Insidiae Structcz Olai Rudbeckii Sueci, hie.  
Lugd. Balau .ssmAn Pro Ductibus hepaticis contra Bartholinum,  
Lugd. Batav.* I 654. *Epistola ad Thomarn Bartholinum de  
Vasts SerosissiUpfalia,* I657.

**RUYSCH (FREDERIC)**

Was born at the *Hague,* on the 23d os *March* 1638. He  
was the Son of *Henry Ruyseh,* Secretary to the States General,  
and to *Anne Fan Berghem.* The Family from winch he was  
descended, was originally of *Amsterdam,* where from the Year  
I365. his Ancestors had, without Interruption, bore the most  
honourable Offices of tite State, till the Year 1576. when a  
War happening betwixt *Spain* and the States, occasioned a  
Revolution in the Fortunes of the Family.

But Mr. *Ruyseh* is far less considerable on account of his Ex-  
traction, than his distinguished Merit aS a Member of Society,  
a Physician, and an Anatomist.

This Gentleman, from his Infancy, devoted himself to Phy-  
sic, and began his first Researches with the Materia Medica.  
The Virtues of Plants, the Structures of Animals, the Quasi-  
ties of Mineral Bedies, Chymical Operations, and Anatomical  
Dissections, were the Objects that first struck his Fancy, and  
called for his improving Hand. He was none of those super-  
ficial Inquirers, who either thro’ Prejudice, or Indolence, rest  
satisfied on this Side of Truth; for he had shipp'd his Mind of  
all those unreasonable Attachments, which are inconsistent with  
'the Temper of a Philosopher; and acquir'd such an indefatigable  
Turn, that his hardest Labours in Pursuit of Truth became  
his highest Pleasures, and his only Recreations.. And eVen when  
he married in 166I. it was in a great measure with a View to  
render his Circumstances easy, that he might pursue Truth to  
the greater Advantage.

About this Time, the famous *Bilsius,* being appointed Pro-  
fessor of Anatomy at *Louvain,* made his Appearance at *Leyden.*This Physician bore it with a high Hand ; undervalued those  
who were justly esteemed the Ornaments of their Profession,  
and, with all the haughty and supercilious Airs os a *Spaniard,*extoll'd his own ’ Discoveries above theirs, especially with  
regard to the Motion of the Bile, the Lymph, the Chyle, and  
Fat. But as Insolence seldom sails to be chastised by real Me-  
fit, so *Deleboe, Sylvius,* and *FanHorne,* then Professors *RtLeyden,*had a mind to check the exorbitant Vanity of this Stranger.  
For this Purpose they courted the Assistance *os young Ruyseh,*who had been more conversant in minute and delicate Dis-  
sections, than they themselves. Mr. *Ruyseh* came from the  
*Hague,* where he lived, to *Leyden,* by Night, presented them  
with Materials proper for encountering and confounding *Bilsius,*and returned home directly, to make new Preparations for the  
same Purpose. et . "

Aster having thus sought in Secret against *Bilsius,* the two  
Combatants came at last to an open Engagement; sor *Sylvius*and *Pan Horne,* to whom he had lent so seasonable an Aid, had  
. no mind to assume the Results of his Industry aS their own Dis-  
coveries. Mt. *Ruyseh,* in the Course ofthe Debate, had  
asserted, that the Resistance he felt upon blowing into the Lym-  
phatic Vessels, gave him Reason to believe, that these Vesseis  
were furnished with Valves, which, he confess'd, he had not  
seen, but said, he was not singular in his Judgment as to that  
Particular. *Bilsius* not only denied the Fact with uncommon  
Assurance, but even testified a strong Contempt for those who  
pronounced the thing possible. *Ruyseh,* who was bless’d at  
once with a clear Head, and an accurate Hand, actually sound  
those Valves, to the Number of above two thousand, and gave  
incontestable Prooss of the Reality of that, which he had be-  
fore advanced aS a Conjecture only. This Accident gave un-  
speakable Satisfaction to Men of Sense, who always rejoice to  
see Merit triumph over Arrogance and Ignorance. *Bilsius,*who regarded Reputation more than Truth, promised to yield  
the Point as soon aS he himself should *see* these Valves: But  
when the Evidence os his own Senses reduced him to a Ne-  
cessity of acknowledging their Existence, ho added Arrogance  
to his Ignorance, and confidently averted. That he knew these  
Valves, tho', for Reafons of his own, he did not chuse to dis-  
cover his Knowledge in that Particular. *Ruyseh,* in a small  
Volume, published in 1665. which, by the way, vias the first  
Work of his that saw the Light, has given us a particular  
Account os this Contest; in winch *Bilsius,* insensible os the

Advantages of Modcsq’, renders himself famous, or rather in-  
famous, for the opposite Vice.

Mr. *Ruysch* was in the Year I664. created Doctor of Physic  
in the University of *Leyden,* and had very soon after a very  
fine, but at the same time, a very deplorable Opportunity put  
into hrs Hand, os convincing the World with how great Justice  
that Dignity Vvas conserv'd upon him; sor the Plague began to  
rage all over *Holland,* and Mr. *Ruysch* had the Care os those  
that were infected at the *Hague,* committed to him. This  
-Office, whatever Share of Glory it might procure him, was  
nevertheless far from being desirable in itself: But it is no  
uncommon thing for Merit and Learning to subject their Pos-  
fessors to Inconveniencies, from winch the Ignorant and Illite-  
rate are entirely free.

But his principal Business, and the Employment which en-  
. gross'd most of his Time, consisted in carrying Anatomy to  
that noble Height of Perfection, at which it had never before  
arrived. Anatomists had long contented themselves with such  
Instruments as were judged necessary sor .separating those solid  
Parts, the particular Structures, or mutual Relations, os which  
they wanted to discover. *Regnier de Graasi,* an entire Friend,  
and an intimate Acquaintance os Mr. *RuysiPs,* was the first,  
who, in order to discover the Motion os the Blood in the Vesseis,  
and the several Roads it took during Lise, invented a new Spe-  
cies of Syringe, by means of winch, he filled the Vesseis with  
fome high-coloured Substance, which sufficiently discovered the  
Road taken by itself, and consequentiy that taken by the Blood  
in a living Animal. This invention was at first approved of;  
but the Practice was soon after discountenanced, because the  
Matter gradually made its Escape, and lest the Preparation good  
sor nothing.

*John Swammerdam* endeavour'd to supply this Defect in de  
*Graaf's* Invention, and happily concluded, thet there was a  
Necessity sor using some warm Substance, which becoming  
gradually cool, in Proportion as it flow'd into the Vessels, might  
at last, when arrived at their Extremities, lose the Nature os a  
Fluid, and by that means become capable os being retain'd in  
.the Vesseis. This, no doubt, required a very nice and discern-  
ing Judgment, both with regard to the particular Quality of the  
injected Matter, its due Degree of Heat, and the just Momen-  
tum, or Proportion os Force, with winch it was to be impell'd.  
By tins means *Swammerdam* first render'd the Capillary Arteries  
and Veins of the Face Visible ; but he did not long persist either  
in the Use or improvement of his new invention ; for an Ex-  
-Cess of Piety soon aster spoil’d his Anatomical Turn, and made  
him look upon such Practices as impious. The devout *Swam-  
merdam* was, no doubt, afraid of rivalling the Almighty in the  
Perfection of his Works ; but his Fears in this Particular were  
ill-sounded. But as the most exalted Degrees of Devotion rare-  
ly extinguish all the Motions of Vanity in the Heart, so *Swam-  
merdam* was tempted to communicate his Invention to his Friend  
Mr. *Ruysch ’,* who was not only fond of it, but afterwards  
practised it without any Fear .of offending God.

Upon his first Trial he sound the Experiment to hold, and,  
in all Probability, produced a more perfect Preparation than  
*Swammerdam* himself had done: The Vesseis were so curioufly  
injected, thet the remotest Parts os their Ramifications, which  
were as flender as the Threads os a Spider's Web, hecame visi-  
ble ; and, which is still more surprising, sometimes were not so,  
without the Assistance os a Microscope. What then must the  
Nature os that Substance be, winch is, at once, so fine as to  
enter the imperceptible Cavities os these Canals, and at the  
same time is possess'd os such a Quality as to indurate itself  
there ?

Small Ramifications were discover’d, which were neither ob-  
servable in the Living, nor to be seen in dissecting the Bodies of  
. those that were newly dead.

The entire Carcases of Children were injected ; for the Ope-  
nation was thought-vepo difficult, if not entirely impossible, in  
Adults. Nevertheless, in the Year I666. by the Order os the  
States General, he undertook to inject the Body of the *Englisu*Admiral *Bercley,* who was killed On the IIth of *June,* in the  
Engagement betwixt the *Dutch* and *English* Fleets : This Body,  
tho’ very much fpoil’d, before *Ruysch put* his artful Hand to is,  
was yet sent over m *Englund* aS curioufly prepar'd as *is* it had  
been the fresh .Carcase of an Infant; and the States General  
bestow'd a Recompence which was at once proportion’d to these  
Grandeur, and the Artist’s Merit.

Every Part os the injected Matter preserved its Consistence,  
its Softness, its Flexibility, and oven gradually acquir'd fresh  
Degrees of Beauty with Time.

Carcases, with all their Viscera, were so sar from having a  
nauseous Small, that they even acquired an agreeable one, and  
that too in Cases where drey finell’d very strong before the Ope-  
ration.

Every Part w preserved from Corruption by Mr. *Ruysebio*Secret. A long Lire afforded him the Pleasure of seeing, that  
his Preparations had, till then, been Proof against the Shocks of  
Time, and even put it out os his Power to ascertain the Length  
ns rheis suture Duration. All his injected Carcases glow with

the striking Lustre and Bloom of Youth ; they appear like so  
many living Persons first afleep; and their pliant Limbs pro-  
nounce them ready to walk . In short, the Mummies of ML  
*Ruysch* were so many Prolongations of Lise ; whereas those *os  
the antient Egyptians* were only so many deplorable Continua-  
tions os Death.

When Mr. *Ruysch* began to produce such surprising Prepa-  
rations, abundance of incredulous People pronounced the Facts  
impossible ; but he gentiy opposed their Obstinacy with these  
Words, *Come and see.* His Museum was not only always open,  
but richly stor'd, is I may he allow’d the Expression, with liv-  
ing Monuments of hiS Art, who were ready to pronounce in  
his Favour, and give the Lye to his Opposers. A certain Pro-  
feffor of Physic Very serioufly advised him to renounce these  
Novelties, and tread in the safe and beaten Paths of his Prede-  
cessors ; but as Mr. *Ruysch* despised the foolish Admonition,  
the Doctor redoubled his Letters, and at last told him, that ins  
Conduct in that Particular was inconsistent with the Dignity of  
a Professor ; to all which *Ruysch* replied, in a noble and truly  
Laconic Strain, **COME AND SEE.**

Mr. *Ruysch* conceals the Name of the Professes, who was so  
friendly, or rather so foolish, as to give him this Advice.. but  
he has acted otherwise with regard to Meff. *Raw* and *Bidloo,*who Were both famous for chest Skill in Anatomy, and had  
openly declared themselves against him ; especially *Eidloo,* who  
. confidently boasted, that he knew the Secret of preparing and  
preserving Carcases better than Mr. *Ruysch* himself. Upon this  
Mr. *Ruysch* ashed him. Why, finco it was so, he had not dis-  
cover'd such and such Parts ? And why he had mangled his Ana-  
tomical Tables, by committing notorious Blunders r which he  
specifies and points out to him. Thus far tho Conduct of Mr.  
*Ruysch* was unexceptionable, and hitherto he appears with all  
the Advantages that a good Cause, and Candour in Dispute, can  
give linn: But soon aster he loses the Temper of rite Philoso-  
pher, and the Gentieman; for, upon *Bidlogis* calling him a *sub.  
tile Butcher,* he stalls into personal Reflections, and says, that .  
he rather chose to be *Laniosubtilis, quam Lenos.amosus,* "a  
" subtile Butcher, than an infamous Pimp.'' The Play  
of Words, and the imagin'd Antithesis, betwixt *Lanio* and *Leno,*may possibly heve induced him to transgress so sar against the  
Laws of Decorum, and true Politeness I But what had he to  
do with the Morals of his Antagonist, when the Extent *of* hiS  
Knowledge was the Subject in Dispute? True it is, that *Bid-  
loo’s* Conduct was so provoking as not to admit of an Apology,  
when he call'd him *miserrimus Anatomicorum, iC the* most  
" miserable of Anatomists." But the Extravagance of one  
Man ought never to unhinge the Mind, or authorize the Rash-  
ness of another.

But tho' Falshood may sometimes have resolute Champions,  
yet Truth never faiis to come off victorious in the End. The  
Beauties of Mr. *RuyfcPs* Art were seen, and the Advantages of  
it felt. The Subjects necessary for Dissection, which the reign-  
ing Superstition of the Times render'd Very few, soon spoil’d in νthe Hands of other Anatomista ; but Mr*. Ruysch* had the in com-  
parable Secret of rendering them of eternal Use. Dissections  
were now no more accompanied with those Ideas os Horror and  
Aversion, which hefore had proved satai to Anatomy .. Hitherto  
Anatomical Demonstrations could only be made in the Winter  
Season, but now the most scorching Heats were equally proper  
sor thet Purpose, provided the Days were equally clear.

Now, considering the Advantages of this Secret, and the  
strong Curiosity that naturally reign'd in Mr. *RuyscPs* Breast,  
we need not be surprised, if he discover'd things that had escap'd  
the Notice of all that went before him, such as the Bronchial  
Artery, which supplies the Lungs with Nourishment, before  
unknown to the most minute and accurate Anatomists; tho  
Periosteum of the *Ossicula Auditus,* which were formerly look'd  
upon as bare ; the Ligaments belonging to the Articulations os  
these *Ossicula.* He likewise found, that the Cortical Substance os  
the Brain was not glandular, aS was commonly thought, but  
consisted of Vessels infinitely ramified ; and that several other  
Parts, which were falfly look’d upon as glandular Bodies, were  
no more than so many Congeries of simple Vessels, which only  
differ'd in their respective Lengths, their Diameters, the Curves  
they described in their Courses, and the Distance of their Ex-  
tremities *from the Heart,* Circumstances on which the Various  
Secretions orFiltrations depend. *Frederic Schreiber,* who writes  
his Lise, when talking os the Extent and Importance os his Dis-  
coveries, seems animated with a kind os Enthusiasm, and expo-  
stulates the Matter in this warmStrain : *Who before him observ’d  
the Vessels running thrti the Tunica Aranea, the Patella, and the  
Acetabulum Coxa ? Who discovered the Vessels diffused in that  
Membrane which surrounds the Marrow of the p.eriebra ? Or  
who found out the vessels in the Meditullium of the Bones, and in  
those Tendons and Ligaments which arc destitute os. Blood p*

*Ruysch,* besides his Practice of Physic, and Professorship of  
Anatomy,- was, by the Burgo-masters os *Amsterdam,* appointed  
Inspector of all those who were either kill’d or wounded in per-  
sonal Quarrels. He was likewise, for tiIe general Good os the  
State, created *Master of the Midwives,* who, generally speak-

Ing, were very ignorant of their Bufiness ; they were too hasty,  
for Instance, in forcibly extracting the *Placenta,* when it came  
not away ; and were often rash enough to tear it, which fre-  
quently caused unavoidable DeathBut Mr. *Ruyseh* taught  
them, tho' with some Difficulty, to wait with Patience for its  
lcoming away, or at least only gently to assist its Expulsion ;  
because an orbicular Muscle, which he had discover'd in the  
Bottom of the Uterus, naturally thrust It outwards, and was  
eVen sufficient to expel it intirely.

At last *Ruyseh* was cheated Professor of Botany, in the Exer-  
«fife of which Office he gave the same Scope to ms natural Ge-  
nius, which he had formerly done in Anatomy. The extensive  
Commerce of the *Hollanders* supplied him with many exotic  
Plants, which he dissected and preserved with incomparable  
Art: He dexterousty separated their Vesseis from their Paren-  
chyma, and by that means plainly shewed wherein their Life  
consisted. Thus Animals and Plants were equally embalmed,  
and equally fine of Duration,, by the skilful Touches of MI.  
*Puys.ch's* Hand. . . . \* - .

His Museum, or Repository of Curiosities, contain'd such a'  
rich and magnificent Variety, that one would heve rather taken  
it for the Collection of a King than the Property of a private  
Man: But not satisfied with the Store and Variety it afforded;  
he would beautify the Scene, and join an additional Lustre to  
the curious Prospect. He mingled Groves of Plants; and De-  
signs of Shen-work, with Skeletons, and diimemher'd Limbs ;  
and, that nothing might be wanting, he animated; if I may so  
fpeak,. the Whole with apposite Inscriptions, taken from the  
best *Latin* Poets. . This Museum was the Admiration of Fo- .  
reigners: Generals of Armies, Embassadors, Electors, and even  
Princes and Kings, were fond to Visit it. When *Peter* the First,.  
*CA.Muscovy,* cameinto *Holland,*..in rhe Year I6951 he was *sts*struck with the View of Mr. *Ruyseh’s* Collection,. that he ten-  
derly kiss'd a little Infant, winch sparkled with all the Graces of  
real Lise, and seem'd to smile upon him. On his second com-  
ing over; in I7I4. he purchased the Collection, and sent it to:  
*Petersiurg:,* but the Industry and long Experience os Mr;  
*Bunsoh* soon supplied him with another. ..

In the Year 1727. he was chosen Honorary Associate os the  
University os *Peterjburig.* He was alfo a Memher of the *Leopffl-  
dine* Academy in *Germany,* and of the Royal Society in *Eng-  
land.*

He died of a Fever in the 92dYear of his Age in I73I; and  
had this peculiar Advantage over most other learned Men, that  
he lived to see all that Opposition, which Malice and Envy  
made to his Merit, hush'd and said to fleep.

; Mr. *Ruyseh* has publish'd a great many Pieces at different  
Times, which were at last reduced into a very confined and  
unaccountable Order, and printed, aS theTItie-page os the first  
Volume ’imports, *~Amstelodarnigi apud s.asseonio-Wacstcrgios,*

is a Peculiarity in one Work of Mr. *RuysePs,* which  
deserves to he taken Notice of, which is, that some Passages os  
his *Adversaria,* winch he publish'd in *Latin* and *Dutch,* are left  
untranlinted into the *Dutch,* What influenced this Author in  
this Case, every one must judge for himself, from the Nature of  
the Passages untranflated. ... . ..

We hope the vast Variety both of entertaining and instruct-  
ing Incidents that occur in the Life of Mr. *Ruyseh,* will suffi-  
ciently apologize for its Length, and account for our spending  
more Time upon him than some of the rest.

**SANTORINI, (J. DOMINICUS)**

( AS I remember,. a *Venetian,* publish'd many Curious Anato..  
mieal Discoveries in his *Observationes Anatomica,* of which there  
have been one .or more *Italian* Editions ; bur the last was printed  
atdurestesw, 1739-42.

His *Opuscula Medina* were printed at *Rotterdam,* I7I9.

**... ScHELHAMMERUs, (GUNTHERUs CHRIsTOPHERUS)**

i A Physician, who, in the latter Part of the last Century,  
was Professor of Physic at *fcrta* for four Yearsand afterwards  
removed into *Denmark,* where he spent the Remainder of his  
Days.' He wrote a Book intituled, *InPhysiologiam Introduction*printed *Hielmastadii,* I68I. 4to. and another intituled. *De Aus.  
ditu Liber Unus, Cugdo Bat. rtiSAn Svo. .*

. . This last, and his *Epistolica Dissertatio de Lympha Ortu, et  
. Lymphaticorum Vasorum Cansis,* are extant in the *Bibliotheca*

*Anatomica.* He also publish'd an Edition of *Conringiurs* In-  
troduction to Physic, with Notes. ' .

He makes Various Observations relative to. the Tongue, La-  
rynx, Salivary Glands, Diaphragm, Mesentery, Colon, Inte-  
stinum Caecum, Receptaculum Chyli, Kidneys, Fingers, Nads,  
and to the Lymph, and Lymphatic Ducts, all which are worthy  
of Consideration.

Some detach'd Pieces of this Author are extant in the *Gcr..  
petan Ephemerides,* as the *Anatomy of a Mele,* and a Treatise  
*De Calculo Cerebri.*

**' SCHILLINGIUS (HENRICUS SIGISMUNDUS)**

Was Author of the following Anatomimi Works:

*Difcurfus Physiologico-Anatomicus de Microcofrti Miseries  
et Perfectionis Excellentia, Witteberga,* I658. in 4t2.

*Tractatus Osteolbgicus, five OsteologiaMe.crccofmica, Drefdae,*I669. in 4to. -

ScHNEItiERUS, (CONRADUs VICTOR)

**A** Prosestor of Physio at *Wiriernberg,* in the Middle os the  
last Century, wrote a great many Anatomical Pieces; but his  
principal Subjects are the *Membrana Pituitaria,* and the Bones  
Of the Head, upon which he has some excellent Remarks.

His Works are, . ’

*... Dissertationes Anatomicee de Partibus, quas vocant. Principal  
lioribus. Capite, Corde, Hepate, cum Observationibus ad Anato..  
midin, necnon ad Artem Medendi pertinentibus, iVittebergar,* 1  
*apud Juhcm. Rocinarurn,* I.643. in 8hei . ... '

*Liber da Ossie cribriform^, et Sensu de Organo Odoratus, et  
Morbis dd utrumque spectantibus, de Coryxa, sudaemogirhagid  
Narium, Polypo, Sternutatione, Amifsiorie.Odoratus, Wittebcr-  
gee, apud Tobiarn Meviurn et Elerdum Schumachegiurn,* I 655;  
in I2what . . . ι. . . .

*Disputationes Osteologtcee aliastoe, Wittiberges, apud Mich a eh.  
Wendiium,* I649i in *Svo.*

*. Disputatio Medica de Ossibus Sincipitis, lVittebcrgcs, apud .  
Juhan. Rahneriim,* I653. in 8wo..

*De Ossee Occipitis, eyufdemque Vitiis ac yulneribus. Ibidem,  
apud Johan. Hacks, anno etsiJorma eis.ds . . .*

*Difputario Medica, de Qfsihus Temporuin. Lbida apud fsahan.*

*Isohnerum, tsmp. in Svo.*

*Oratio de AEquitace ac Justitia Nattira, ibid.* I646. in4to. .

*. Oratio de Bellis Natures, ibid,* in *FA.*

*Dissertatio Anatarnico-Chirurgicu, de Natura Offis Frontis,  
et ejus Fulncribus acViiiii, ibid.* I 650. in Snol . .

*Liborprimus de Catarrhis. Nuo agitur de sipeciebus Catarrho-  
rum, et de Osse cuneiformi, per qundCoaiarrbi decurreresinguni.-  
tur, Witieberga,. apud Harr. Tobia Mevii, et Elerdi Schuma-  
chers,* I660: in 4rd.

*Libcr de Catarrhis fecundus, quo Galenici Catarrhorum meatus  
p.crfpicdefalsi revincuntur, ibid, apud Eofdern, anno et forma,  
eifdern.* - ν . . ... .

*Libcr de Catarrhis tertius, quo Novi Catarrhorum meatus  
demonstrantur, ibid, apud Eofdem,* I 66 I. incedo. -.

*Libcr de Catarrhis quartus, quo generalis Catarrhorum Cura.,  
rio ad novitia Dogmata et .Invent'd paratur, ibide apud Eun-  
dem, anno etforma discern. . f ... - . .*

*Liber Quintus et ultimus de Catarrhosonum Dicet An, et de  
fpeciebfis Catarrhorum, etc. IVitteberig.a,* 1662. in 4to;

*Libcr de Catarrhis fpeciatisiiinus, etcs Witieberga,* I674. in  
*4tc. I si .. . . .. . . . .. . .... ' \_ .*

*. Liber de Morbts Capites seu Cephalicis illis, ut vacant, sopo-.  
rosu, eta. Wittebcrg'ce,* I669.' inaro. .

*- Liberi de Nava Gravissimorum orium .Morborum Curatione,  
etc. Pr'ancofurti, l6y2.* in 4m. *.i . .* Λ :

*. Liber de Sfeismoruin Natura et Subyecto, etc; Witieberga,*I678. in 4to; - t .6

**. .finYERINioS (MARCUS AURELIUsj**

. Was Pupil *to suulius Joasselinus,* in the Beginning Of. the last  
Century, and afterwards Professor of Anatomy and Surgery at  
*Naples.*. He is inore-famous for ins Chirurgica! than his Ana-  
tomical Works, and perhaps excell'd in Surgery by the Help of  
Anatomy, without which it would be very difficult to make any  
considerable Figure in that Profession. His Anatomical Works  
are, si '..'.I " .

*. Tootomia Democritea, etc. Noriblumgee,* I 646. in 4to.

*.HistoriaAnatornica, Obseruatinsi, Medica, eviscerati Corporis,  
Neapoli, I* 629; in 4to. . . . .

*De Aqua Pericardii Cordis Adipe, Paris Chclidocbis, Hanoi.*

*via,* I654. in 4to. , :

' His *^ucastioofei Anatoiniide qaainor.* I. *De Aqua Pcricardii.*2. *De Cordis Adipo, et - De Boris Choltdochisso.* 4. *Ostcologia,  
pro Galeno, adversus Argutatores. Epidocdae in focidem alias flulii  
Jufolirfi,* are extant in an Anatomical Piece of *Volckamefs,  
Hanoviee,* I654. in 4to: *Francofurti,* Ifi68.: in I2ein.

- SI.FERsts» (NIcOLAUsj .soetsi " "

' About' the-Middle of the last Century,-wrote the following  
Anatomical Pieces: - '. - .’-7' .'.

*Responsio ad Vindicias Hepatis Reslivivi contra Deusingium,  
Lugd. Batauorum,* I662. in *12mo.*

*Observationes Anatomicae de Glandules- Oculorum, novis.que  
eorum Vafts, Hafniee,* 1664. in4to.. ...?..

*' Observationes Anatomica de Glandulis Oris, Lugd. Batavo\*  
rum,* I662. in 4ro;sand *12mo.* ” ' ’ - \_ ' - ' ἰ

**\'. so Ἀ SYEN0, (NICOLAUs)**

**- A** *Cyane,* flourish'd shout the Middle os the last Century.  
He enrich'd AIiatomy with many Valuable Discoveries: Amongst

other Things, he observed the Ducts which convey Moisture  
to the Eye for the Convenience of.its Motion in rhe Omit,  
-and in 1662 describe a salivary Dced not taken Notice of be-  
fore, which comes from the Glands which sic near the Ears.-  
He alio observed, that the Fibres of the muscular Coat of the  
Pharynx are spiral in a double Order,' one ascending, and the  
other descending, which run contrary Coutfes, and mutually  
cross each other in every Winding.- Besides these; he made  
several Observations concerning the Lympheducts. .

His Anatomical Worke are,

*. De Mu/'culis et Glandulis Observationum Specimen, etc.  
Hasuia,* I667. *in ate. Amstelodami,* I664. *in same. Lug-  
duni Batavorum,* I683. *in* Ι2εηο. This is in the *Bibliotheca  
Anatomica. " ’*

*. Dissertatio de Cerebri Anatome.* This is transtated *from* the  
*French* Edition of 1669. by *Guide Fancistus, Lugd. Bat.* I 67 I.  
*in limo.* This is also in the *Bibliotheca Anatomica.*

*' Observationes Anatomica, quibus varia Oris, Oculorum &  
Narium Vasa describuntur, noviseque Salivae, Lachrymarum et  
Asm i Fontes deteguntur , et novum Bilsti de Lympha Motu et  
Use Commentum examinatur et rejicitur. Lugd. Bat.* I662. *in  
iQjno. Ibid.* I68o. *in iirno.*

., This is also in the *'Bibliotheca Anatomica.*

*Elementorum Myologiae Specimen, feu Musculi Deseripsm Geo..  
, metrica. Cui accedunt' Canis Carchariae dissectum Caput, et dif-  
fictus P if cis ex Canum genere. Amstelodami,* I669. *in* 8ϋο.

. This .is also in the *Bibliotheca Anatomica.*

**STocKHAMERUs,** (Franciscus)

In the latter End of the last Century, published the follow-  
ing Anatomical Pieces :

*Adicrocofmegraplaa, sive Partium humani Coi peris omnium,  
ciirumqurActionurn et Usuum brevis quidem, accurata tamen et.  
atoma Descriptis, novis hujus feculi Inventis exornata. Vienna  
Austria,* I682. *in simo.*

**STRAUssiUs (LAURENTIus) -**

- Flourish’d in the latter Part of the last Century. He published  
manv Pieces, amongst which, those that are Anatomical, arc

*Conatus Anatomicus, aliquot Disputationibus exhibitus. Fran.*(of. I665. *inuri.* ; τ -. 2.

*Alicrocofmographia Metrica, Jive 'humani Corporis Historia  
Elegiacs Carmine exhibito, et ad Sanguinis Circulationem, et  
pleraque nova Anatomicarum Imtentaeaccommodata. Giejscae,* 1679.  
*in* 8υο. - . s

**. ~ C' SVIAMMERDAM (JOHANNES).**

' He was a celebrated Anatomist of *Amsterdam,* in the latter  
Part of the last Century, having been a favourite Pupil of *Van  
Harne,* under whom he made a considerable Progress in the Art  
of dissecting and preparing Bodies..

*/ De Graaf vns* Pupil to *Van Harne* at the same Time with  
*Swammerdam,* and is charged by *Swammerdam* with Plagiarisin,  
in stealing the Eifcoveries of their common Instruitor, and  
claiming them as his own. His Works are in very good Esteem,  
and are, ' . .

*Miraculum Naturae, suae Utcri Muliebris Fabrica. Natis in  
DA oh. Van Hiorne Prodromum illustrato, et Tabulis adarisesc.  
Expertissemiseue Viris : cum ipse Archetypo collatis, adumbrata.  
Adjecta est Nava Methodus, Cavitates Carparis ita praeparandi,  
ut seam semper genuinam faciem servent. Lugd. Bat.* I672. *in*αιο. *Ibidem,* I679. *ia ate.* This is in the *Bibliotheca Ana-  
tomica.* r. ... ; -:i ... . . .-

*TractatusPhyJico-Anatomice-Medicus, de RespiracisneUfuque  
Pulmonum. Luse. Bat:* I667. *in 8ve. lbide ihyg. in 8vo.*arid *L. Bat.* I738. This is also in the *Bibliotheca Anatomica.*

**- ' - - . SylonIUS (FEAucoNIUs DE LA ΒΟΕ).**

.‘ He is more known as a practical Author, than as an Anato-  
mist. He. was horn at *Hanover,* in I6I4; practised at *Arn-  
Jserdam* 5 afterwards was a Professor at *Leyden,* where he dy’d  
in I678. . . ῖ. ‘ .. ... . '

Wbat.gives him a Title to a Plane here, is his System of  
the Bile, which, ’tis said, ho' borrow’d from *Nemossus .* and  
the Discovery which he claims-of the *Os Orbiculare* of the in-  
ternal Ear, whese Situation, however, he mistook ; for he  
thought it was placed on the Side of the Head of **the** *Stapes,*whereas it is placed hetwixt thet and the *Incus.*

se:' s **TAuvRY, (DANIEL)**

. Α *Preach* Physician, - who published a Treatise of Anatomy,  
hut of no great Character, being remarkable for extravagant  
Hypotheses, and ill-concerted Theory This he published un-  
der the Tide of *Anatomic Rensennee,*. about I687, heing then  
but eighteen Years old. In I7oo he published his *Traite de la  
Generation, et de la Nauriture du Foetus.* He dy’d in I70I, in  
the 3rst-Year of bis Age.

**TiLINcIUs (MATTHIAS)**

Wrote several Anatomical Pieces, but is not remarkable for  
anv new Discoveries. He list’d in the letter Part of the last  
Century. . His Anatomical Works are,

*De Tuba Uteri, deque Fatu nuper in Gallia, extra Uteri  
cavitatem, in Tuba concepto. Exercitatio Anatomica. Rinthelii,***I67O.** *in simo.*

*' De Placenta Uteri Difquisttie Anatomica, novis in Medi,  
cina Hypothesibus Alastrata. Rinthelii, i6fn. in limo.*

*De Admiranda Renum Structura, eorurnque Vfu nobili in  
Sangulstcatione, SeminisPraparatione, acHarnsris surest Sanguine  
Segregatione, consciscente. Exercitatio Anatomica,, ex Principiis de*

*. Circulari Sangulnis Motu illustrata. Francof.* **I672.** *in surito.  
Anatonda Lienis, ad Circulationem Sangulnis, aliaque Be-.*

*centiorum inventa, accommodata. Rsnthelii,* I673. *in 12ms..  
Ibide* I676. *.in sdrno. . . .*

**Παρέκβασις,** *seu Digresse» Phyfico-Anatomica Carioso de Vase  
brevi Lienis, ejufq '. Usa nobili ac egregie in Corporis humani Oe-  
conomia. Mindae, sduri). in Alma.....*

' Tyson **(EDwAItD).**

This Gentleman was Physician to *Bethlehem* Hospital, Fol-'  
low of the College of Physicians, and Lectirrer of Anatomy at.  
Surgeons. Hull.. . .

He was a very accurate Anatomist, as appears by several Dis-  
sertations, of which he was Author, interspers’d in the *Philese-.  
place! Transactions,* and the *Acta Eruditorum,,* relating - to the:  
human Anatomy, that of Beasts and Insects. .... ... r:'

His *Phocaena,* or the Anatomy of a Porpus; disseised at *Gre..  
seam* College, with a preliminary Discourse concerning Anatomy;  
and a Natural History of Animals, was printed *London,* I68I..r

**VALSALVA (ANToinus MA'RIA)**

This Physician was born at *Imola,* S City of *Italy,* and -was-  
Professor of Anatomy at *Bologna. '* His Treatise on the Ear is:  
esteem’d an excellent Performance, and contains many Disco-  
veries relating to that Organ. He alfo describes, and gives new-  
Figures of, the Muscles ofthe Uvula and Pharynx. ' *"’-t.' .*

**... su' VERHEYXN. (PHILIP).tio** rri

- He was born in I64S. He intended originally to turn his  
Studies towards Divinity ; but having lost one of his Legs by  
a Mortification, he apply’d hainself entirely to Physic, and was  
Professor of Anatomy and Surgery at *Louvain,* where, he ac-  
quir’d great Reputation, and died of a Fever in I7II, much  
regretted by the learned World. His Anatomy bears an ex-  
cellent Character, and has gone through several Editions, **the**third ofwhich is rhet printed *Brux, s-j2.su* 2 Vote 4.ο.

**. - VRRLB (JoHAKNEs BAPTISTA) ;**

Wrote a Treatise intituled *Anatomia Artificialis Oculi hu-  
mani.* This was printed at *Amsterdam,* I680. *-crane,* and is  
extant-in the *Miscellanea Cariofa,* and in the *Bibliotheca Ana..  
tamiea. -- - .* i. . . \_ -

**VERNEY (GUICHARD JoSEPII DU).**

- This celebrated Anatomist was hern at *Feurs en Forez, Au-  
gust* the ;th,-I648. His Father, *Jaques du Verney,* was a  
Physician at-that Place. : He .study’d Physic five-Years at  
*Avignon,* and came to *Paris* I667, where he was soon aster  
employ’d in dissecting the Brain, before Assemblies of learned  
Men, who us’d to meet at the *Atbe Bourdelet's,* and at Mr.  
*Denysts,* a learned Physician at *Paris.* He acquitted himself so  
well on these Occasions, that in I 676 he was received into  
the Royal Acedemy of Sciences as a Memher , and afterwards  
read Ledtutes to the Dauphin in Anatomy. In . I679 he was  
constituted Professor of Anatomy at the Royal Garden. /

In I683 he published his *Traite de POrgane de I’Oiie,* which  
the following-Year was transtated into *Latiis,* and printed-at  
*Nuremberg.-.* He dy’d the rorb of *Septembcr* I7 3o. **The**above-mentioned Treatife on the Ear is in great Esteem, and  
is the only Work lie published.

**VESLIKCIUs (JOHAnNEs). ,**

“ - He was Professor of Anatomy and Botany at *Padua,* **in the**Beginning of the last Century., His *Syntagma Anatomicum*bears a good Character ; of-which there have been many  
Editions adorn’d with Figures ; but thet of *Amsterdam,* I66S,  
with-Notes, and an Appendix by *Gerard -Blastus,* .is in most  
Esteem. . . - ... . : .

**VIEUSSENS (RAYMOND). .**

He was of *Jldontpelier,* and was famous, for understanding,  
with great Accuracy, the Anatomy of the Brain, spinal Mar-  
row, and Nerves, in which he sometimes dissents from *Wollis.*In his *Meurologia* he gives a very good Description, and mag-  
nificent Figures, of these Parts. - His *Naurograplaa* was painted  
*Lugrl.* 1684. ... .

**VIGIERIUs (JOHANNES).**

' He was a celebrated Surgeon, and liv’d about the Middle of  
the last Century. His *Encheridium Anatomicarum* is printed  
with his *Opera Ildedico-Chirvrgica, Haga Comitum,* I 659.  
*QuartO. . tio.*

**VIRSUGUS (JonANNEs GEORGIUS).**

He was a *Bavarian,* and a considerable Anatomist: He pub-  
lished no Work, hut render’d himself famoils by the Difco-  
very of the DuA of the Pancreas, which discharges the Fluid;  
separated in thet glandulous Substance, at the fame Place where  
the Ductixs communis Choledochus opens into the Duodenum.  
This he discover’d in I 642. He was, not long after, shot by  
an *Italian,* in bis own Study; who, it was thought; had been  
hired to murder him. His Name is sometimes spelt *Wor-  
tumgus.*

**VOEKAMERUs (JOHANNES GEoRGtUs).**

He was a Physician of *Norirnierg,* about, the Middle of the  
last Century.

There are a great many detach’d Pieces of this Author in the  
*' German* Ephemerides , besides which he publish’d

*1 ‘ Collegium Anatomicum concinnatum ex clurissemis Triumviris :****ex*** *JuliiJasclini, Locris, Quaestionibus Anatomicis.* I. *De Cor-  
dis Adipe.* 2. *De Aqua Pericardii.* 3. *De Peris Choledochis,  
et Vesica Fellea.* 4. *Osteslogia parva : Marci Aurelii Seve-  
rins, Thurii, totidem Epidachis ; et Bartholornaeo Cabrolio, Aqui-  
tano. Hamvia,* I654. *in* 4ιο. *Francof* I668. *in alo.*

*Epistola de Stomachs, scripta ad Dost, Johan. Georgium Sar-  
torium, Altderphi Nariccr.* I682. 4ιο.

**WEPFER (JOIIAKNEs JACOBUS).**

He was a Physician of *Schaffhausen* in the fatter Part of the  
last Century, and oblig’d the World with many curious Ana-  
tomical Pieces ; particularly some relating to the Anatomy of  
People who drfd Apoplectic. Hrs Anatomical Works are,

*Observationes Anatomica, ex Cadaveribus eorum, quos sustulit  
Apoplexia, cum Exercitatione de eius Loce affecta. Schaff.* I658.  
*in* flos. *Ibide* I675. *in 8vc. dur.* I68I. *in Svs.*

*Historiarum et Observationum Apoplecticarurn et similium, po-  
tissimum Anatoma. subjectorum Auctarium : cum Schsliis. Ibi-  
dem, amo et forma etfdem. . .. .*

*Historia Anatomica de Puella sene Cerebro nata. Schasth.*I665. *in* δυο. This is in the *Bibliotheca Acatornica.*

*De Dubiis Anatomicis Epistola.* This is puhlishid, together  
with a Trealise of *jacobus Henricus Paullus,* intituled, *Ana-  
tornia Bilfiana Anatcrne, Nariberga,* I 664. *in* 4.ο. *Argent.*I665, *in* 8υο.

**WESENFELD (CoNRADUs).**

. I don’t know, thet this Physician ever published any thing in  
Anatomy 5 but *Johannes Petrus Albrecht,* in the *German* Ephe-  
merides, relates, That *Westenfeld* thought: he observ’d, in a  
Criminal he dissectsd, forne Ducts which pass from the *Intesti-  
num Caecum* to the Bladder of Urine : But I don’t find, that  
thefe heve been observ’d by any one since.

**WHARTON (THOMAS). . '**

He was an *English* Physician, and in I656 published a Trca-  
tife on the Glands, intituled, *Adensgraphia*; in which there are  
many curious Particulars not known before.In particular he  
discover’d a Duel, which, arising from the conglomerate  
Glands, which are situated in the inner Side of the lower Jaw,  
conveys *Saliva,* which it discharges near the Middle of the  
Chin into the Mouth.

**WILLIS (THOMAS).**

He was a Physician, educated at *Oxford,* where be was  
Professor *of* Natural Philofophy. He was born in I 620, and  
dy’d I677. He was more eminent for his Practice in *Linden,*-then valuable for his Theory, which in many Instances happens  
to be none of the best. He was, however, an excellent .Ana-  
tomist, particularly in whet relates to the Brain, Nerves, Sto-  
mach, and Intestines.

*Piccolhsndnus* had observ’d before him, that the Brain, pro-  
perly fo called, and Cerebellum, consist of two distinib Sub-  
stances, an outer Ash-colour’d Substance, thro’ which the  
Blood-vessels, which lie under the Pia Mater in innumerable  
Folds and Windings, are disseminated ; and an inner, every-  
where united to.it, of a nervous Nature, that joins this Bark  
(as at is ufiially called) to the Medulla Oblongata, which is  
-the Original of ell the Pairs of Nerves that issue from the Brain,  
and of the spinal Marrow, and lies under the Brain and Cere-  
bellum. After him, Dr. *Wollis* was fo very exaol, that he  
-traced this medullary Substance, thro’ all its Insertions, into the  
.Conical Substance, and the Medulla Oblongata, and examined  
.the Rifes of all the Nerves, and went along with them into every  
Part of the Body, with wonderful Curiosity. Hereby not only  
-rhe Emin was demonstrably proved to be the Fountain of Senfe  
and Motion, but also, by the Courses of the Nerves, the Man-

ner bow every Part of the] Body conspires with any others to  
procure any one particular Motion, was olearly shewn ; and.  
thereby it was made plain, even to Seofe, thet where-ever  
.many Parts joined at once to cause the fame Motion, that Mo-  
tion is caused by Nerves that go .into every one of those Parts,  
which are all struck together. And tho’ *Vieujscus* and *du Var-  
ney* have in many things corrected DI. *Wollida* Anatomy of the  
Naves ; yet they have strengthen’d his general. Hypothesis,  
even at the Time when they discover’d his Mistakes.

He separated the Coats of rhe Stomach, and examined the  
several Fibres of the middle Coat, with more Exactness than  
formerlyhe alfo has been very nice in tracing thc Blood-  
vessels and Nerves that run amongst the Coats ; has evidently,  
shewn, thet its Imide is covered with a glandulous Coat, whose  
Glands reparate thet Mucilage, which both preserves the  
Fibres from being injuPd by the Aliments which the Stomach  
receives, and concurs with the Spittle to further the Digestion  
there performed ; and has given a particular Account of. all  
thofe several Rows of-Fibres, which compofe the muscular  
Coat.

**WiKstow,** (James **RENIGNUs)**

. Professor of Physic, Anatomy, and Surgery’ in. the Univer-  
sity of *Paris*; Member, of the Royal Acedemy of Sciences, and  
of the Royal Society at *Berlin.. . ..*

in I723 he published an excellent Work intituled *Expasction  
Anatornique de la Structure du Corps humain, atoi*

This, was tranflated by Dr. *George Douglas* into *Englise,* and  
published *London,* I734. . .. -....t...

- It is esteem’d the best System of the solid Parts of the Body  
which has yet appeared, and is remarkable for Conciseness and  
Perfpicuity and for the exmi Order of the Work. The Au-  
thor is, however, charged with introducing new Terms into  
Anatomy without any Necessity, which can only tend to mi  
broil the Science, and perplex Students. The famous *Stena*was great Uncle to *lViastow. .*

ANATON.. See AN Ain *Ros. , .*

.. ANATRESIS, ἀνάτρησις, from ἀνἀ and τροἰω, to perforate.  
It signifies literally Perforation , but by *Galen* is ufed to signify,  
Trapanning. ..

ANATRIBE, ἀνατριβὴ,’ and , .

. ANATRIPSIS; ἀνάτειψις, from άνἀ, and τείβο',ΐο rub.  
Friction..... ...... ... - .

ANATRIS, or, ANTARIS, Mercury.

ANATRON, or, NATRON, is a Salt taken from the  
River *Nile in Egypt,* by" Crystallization, Or by Evaporation.  
It was very probably the Nitre of the Antients, and is rarely  
found in *Europe.* It is a little acrid and alcaline to the Taste.  
. It ought to be chosen in a Lump,1 white,’ looking as if cry-  
stalliz’d, ponderous,, having the Tasto of common Salt, but of  
a bad Smell, easily moistening in the Air. - The Washerwo-  
men made use of it formerly, instead of the Salt of *Kali,* to  
whiten their Linen ; from whence it is improperly called by  
the Name of that Salt. The Butchers also make use of it in  
the room of Sea Salt, to season their Flesh-meats.

This Salt is very aperitive, if taken inwardly . externally  
taken, it deterges, dries, and resistetb a Gangrene. It is an  
Ingredient in the Composition of the Stone of *Crollius. -*.. -There is alfo an artificial Anatron called *Andtron Factitiam i*it is compos’d of ten Parts of Saltpetre, four Parts of quick  
Lime, three Parts of common Salt, two Parts of Roch Alum,  
and two Parts of VrtrioI; All.thefe are dissolvedin Wine,- and  
the Dissolution boiled . then strain it, and evaporate it to thfe  
Consistence of Salt. It is used as Borax to purify Metals, and  
put them in Fusion. *Lemery des Drogues.*

There is a very great Difference between the Nitre, of Na-  
trurn, of the Antients,' and our Saltpetre, which we do not  
know whether the Antjents were acquainted with or not : And;  
.in like manner, their Nitre is almost unknown to us.

By Nitre the Antients - understood an acrid, alcaline Salt,  
sound in *Egypti* and other Pisces, which, as it made an Effer-  
vescence with Acids, was used as a lixivial Salt for cleansing  
Cloaths, and for making Glass. *Solomon* mentions the Esser-  
vescence of Nitre with Vinegar, *Prov.* xxv. *io.* where he  
compares a Man thet sings Songs with an heavy or affiictird  
Heart, to a Mixture of Vinegar and Nitre; which Antipathy,  
or Contrariety, cannot be understood of the common Nitre,  
of Saltpetre, which raises no Estorvefcence with Vinegar, The  
Antients frequently ufed their Nitre, or Aphronirrum, in  
Baths, and the Women in their Washes ; whence *Jeremiah*fays, Chep, ii. Ver. 22. *Though thou wascest thee with Nitre,  
and takest thee much Soap, yet thine Iniquity is marled before me,  
faith the Lord God.* This cannot he said of Saltpetre, but of  
the Lixivium of that alcaline Salt,- which was brougni from  
*Egypt* by the Name of *Nitrum,* or *Aphronitrum. - -.. ....*

This Nitre easily relented in the Air, fermented with Vine-  
gar, and had an abstersive Quality 5 and even at this Time,  
in the Fields of Lesser *Apia,* near *Smyrna* and *Ephesus,* .the  
Earth riles in sinall Hillocks, placed very near each other, like

Molehills, during the Spring and Autumn, of which the In-  
habitants prepare a Ley for washing Cloaths; aS also of the  
Salt they get from .that Earth, by dissolving it in Water, they  
make Soap ; as is related by the great *Toumofart.* This an-  
tient Nitre was likewise used to make Glass, heing mixed  
with Sand, as they afterwards did. with the Salt of the Plant  
. Kali, or Glaffwort, as may he gathered from what *Tacitus*lens. Hist. 1. 5. That the Sands of *Palestine* and *Syria-,* near  
*Egypt,* were made into Glass with Nitre. .

It is evidens, therefore, that the Nitre of the Antients was  
quite different from ours. At this Time it is very little ufed,  
and very rare in *Europe,* tho' it was Very much in Use amongst  
the Antients, both for making of Medicines, and for other  
Purposes of Life. The common Custom of Bathing alone con-  
sumed a Vast Quantity of it. It served likewise for Dying, for  
seasoning Victuals, and for glazing earthen Veffeis. Very littie  
of it is brought us; and it is Very bard to determine the Aphro-  
nitrum, or the *African* or *Egyptian* Nitre, or *Spuma Nicri,*which I .helieVe to he the Baurach of che *Arabians,* and the  
*Grecian* Nitre. Nitre was a native Salt, of a red or white  
Colour, and bitter Taste. It did not sty in the Fire like com-  
mon Salt, nor flash like Saltpetre, but melted, and rose in  
Bubbles, like Alum and Borax. It made an Effervescence  
with Acids ; and hence I look upon it to have heen of the  
same Nature with the Salt of Tartar, or Pot-ash. See NA-  
**TRoN.** *Geosuroy.*

ANATRON sometimes signifies the Gall of Glass, winch  
is nothing else but the Spume cast up by the Matter of which  
Glass is made.

It is also taken for the Terra Saracenica, of which there are  
three Kinds, which are the Black, the Red, and the Azure.  
- Sometimes it means a white and finny Excrescence, which  
grows on Rocks, in Form of a white Moss, and is called by  
some *Sal Nitrum.* It is also called, *Anachron,. Anatrum.,* and  
*Anatem. Castellus* from *Ruland. Johnson, Schrod. Hessen.*

ANATROPE, Ἀνατροπὴ, from ανατρέπω, to subvert. **A**Subversion, literally, or Relaxation of the Stomach, attended  
with Loss of Appetite, Vomiting, and Nausea. *Galen.* The  
Verb άνατρἐπω, in *Hippocrates, Lib. de Art,* signifies to sub-  
vert, nun, and destroy.

ANATRUM, the same as *Anatron.*

ANATTJM, Egg-shells. *Johnson. .*

\_ ANAUDOS, Ἄναυδος, the Word is explained by *Galen* on  
*Hippocrates,* to signisy one that has lost the Use of Speech, and  
Aphonos, ἄφωνος, to mean one who can utter no voice. . In  
the former, the Organs os Speech, or articulate Voice, are in-  
jur'd or clogg'd; the other, who has utterly lost his Voice, has  
the Installments thereof, as the Larynx, with the Muscles and  
Nerves thereto helonging, disabled from performing their Fun-  
ction. The Word is derived from α Negat, and ἀυδἡ. Speech ;  
as Aphonos, ἄφωνος, comes from α Negat, and φωνῆ. Voice.

ANAVINGA. *staccifera Indica, Fructu rotunda cuspidato.  
Cerasi Magnitudine, polypyreno. . Anauinga Hi M. P. 4. T.* 4q.  
*p.* **IOI.**

A Tree of a middle Size, that grows in *Malabar* in the  
*East-Indies,* especially .about *Cochin.* It is an Evergreen, and  
its Fruit, or Berries, are ripe in *Angust.*

The Juice of the Berries drank-excites Sweat, cures Inalig-  
nant Distempers, and keeps the Belly soluble. The Decoction  
of the Leaves in Water makes a fit Bath for such are affected  
with Pains in the joints. *Rail Hist. Plant.*

ANAXYRIS, Ἀναξυρὶς, a Name for a kind of *Lapathum,*called Otherwise *Oxalis,* and *Lapathum agreste. Oribas. Med.  
Coll. Lib. is.*

ANAXYRIDES, Ἀναξυρίδες, in *Hippocr, de Acre,* &c.  
signifies a sort of Breeches, or Drawers, worn by the *Scythians,*From ἀνασύρω, to draw upwards, changing σ into ξ.

ANBLATUM, *Cordi, Jive Aphyllon, Jf.* B. *Orobanche Ra-  
dice dentata, major,* C. B. *Dentaria mayor Matihiolo,* Ger.  
*Orob. Radice dentata, sive Dentaria major Matthiolo,* Park.  
The GREATER TOOTHWORT.

i It flowers about the latter End of *April,* and Beginning of  
*May.* It has heen observed in a shady Lane, not far from  
*Dorking, in Surry* ; at *Bredgate,* near *Sittingborn* ; about *Che-  
silhurst* and *Maidstone, in Kent y near Dalsion, in Westmor-  
land-,* and *Heptonstale \s\ Yorkshire. Syn. Ship. Brit.* 288.

I find no Virtues ascribed to it. *Martyn's Tovrnesiort.*

AN CHA, a Word used by *Avisenna,* and sometime by *Fo-  
restus,* and signifies the same as *Coxa. Castellus.*

ANCHILOPS.

The Anchilops is a Tumour situate at the great Angle of **the**Eye, for the most part, under the Conjunction of the Eye-lids;  
it degenerates into an Abscess, and is twofold, the one, attend-  
ed with Pain, the other almost without any Pain.

The Anchilops with Pain is often accompanied with a Vio-  
lent Fever, which continues till the Matter is formed and dis.  
charged.

The Anchilops with little Pain is, for the most part, **free**from a Fever; the Swelling of the great Angle is light, and  
the Colour Of the Skin but littie changed.

This Tumour is produced by various Causes: i. Py the  
Lymph, which passes from the Eye through the Lachrymal  
*Points,* into the Nose. For, if this Humour, winch ought to  
enter these finall Chanels, be Vitiated, or the Parts, through  
which it should .pass, be obstructed, it will certainly cause, by  
its Stagnation, an Abscess in the great Angle. This Lymph  
may he Vitiated in a twofold manner: I. When, through its  
Acrimony, it corrodes the inward Parts of the Lachrymal Bag,  
and so causes an oufing of purulent Matter, which enters the  
Lachrymal Duct, and stops it. The Lachrymal Lymph, being  
thus intercepted in its Passage, filis the Bag, swells it, and  
raises the upper Part of it, aS appears from an Eminence, or  
Rising, under the Union of the Eye-lids; If this Eminence he  
pressed, the Matter regorges through the Lachrymal Points.

. 2. When the Lachrymal Lymph grows too thick or viscid, aS it  
cannot pass through the Nasal Duct, it stagnates in the Lachry-  
mal Bag, and there produces a Rising like to the hesorle-men-  
tioned Eminence, with this Difference, that, when the Tu-  
mour is press'd, the Humour stows through the Nose; this  
does not happen, when the Tumour is produced by the first  
Cause. Sometimes there is no Defect in the Lymph, but the  
Membranes, which form the Lachrymal Duct, are inflamed. AS  
this Duct is obstructed through the Distention of its spongy  
Tissue, the Serosity must stagnate in the Lachrymal Bag, and by  
stagnating becomes acid, and excoriates the Inside of the Bag,  
from whence the forementioned Accidents arrive.

. This Repletion of the Lachrymal Bag, from the Stagnation of  
its Lymph, is called by some a *Dropsy,* whether, when the  
Bag is squeezed by the Finger, the Lymph pastes through the  
Nose, or flows towards the Eye. But this new Name for this  
Disease is altogether improper ; for all Dropsies suppose an Ac-  
cumulation of a watry Humour in some Cavity, out of which  
it has no Egress. But, in the present Case, the Matter-con-  
tained in the Lachrymal Bag may he squeezed out; nay, the  
Very Lymph passes through most Peoples Noses, when they are  
afleep; so that, in the Morning, the Bag is empty, tho’ three  
Hours after the Patient has got up, the Bag fills again, which  
obliges .him to empty it. This Observation seems to shew, that,'  
whilst the Patient is in an erect Posture, the Lachrymal Bag form?  
a fort of Fold, or Plait, which stops its inferior Passage. -

When the Lachrymal Bag is filled in the above-mentioned  
manner, and the contained Humour is too thick to pass off,  
either through the lachrymal Points, or through the Nasal Duct,  
it causes an Inflammation, winch turns to an Abscess, and forms  
the present Disease. What has been premised, sussicientiy deli-  
neates the Signs of an Anchilops, when it is formed; but it is  
hard to know it, in the Beginning; notwithstanding, when the  
Tears cease to flow through their usual Passages, .or when they  
stow with more Difficulty, a filmy Humour may be perceived  
at the great Angle, attended with a light Inflammation, with  
Pain, Itching, and a Flux ofTears. These Symptoms accom-  
pany most DestuxionS.

When the great Angle of the Eye is pressed, *if* a whitish  
Humour stows through the Lachrymal *Points, or the* Eminence  
in the Lachrymal Bag appears, there is Reason to sear the Hur  
mour, contained in. that Cystis, will become acid, and an  
Abscess ensue.

Abscesses of the great Angle, for the most part, degenerate  
into a Fistula Lachrymalis, and sometimes into a Cancer, when  
their producive Humour is malignant.

Care must be had to examine strictly, whether the Abscess  
opens into the Lachrymal Bag, or whether it he only superficial  
between the Skin and the Orbicular Muscle, In the latter Case,  
there is mo Fear Of its changing to. a Fistula, if the Matter is not  
lodged between the Bag and the Muscle. When, by the pre-  
cedent Signs, we perceive the Lymph is obstructed in the La-  
chrymal Bag, we must immediately apply Remedies to prevent  
the Increase of the Distemper; for which Reason the Patient  
must he let Blood. Let him take every Morning a Broth  
made of Veal, Chervil, Bugloss, Borrage, and Succory ;  
he must likewise he purged from time. to time. He must use  
-the House Baths, and other Remedies proper to rectify the bad  
-Crafts of the Lymph. In this Case, injections through the La-  
chrymal *Points* aro chiefly useful; but you must take care, ifthe  
-Bag be considerably dilated, to press it a littie with your Finger,  
whilst you syringe; otherwise the injection, instead of doing  
any Good, will he very pernicious; for, without this Precau-  
tion, the injected Liquor will cause a greater Dilatation of the  
-Bag: After you heve ufed the Syringe five or six Days, if the  
Injection through the Lachrymal *Points* does not pass into the  
Throat, or stow through the Nose, it is of no Service ; which  
confirms my Opinion, that it is proper only.in simple Obstru-  
ctions of the Lachrymal Bag, but not in a Fistula Lachrymalis.

A Bandage, that shall compress the Lachrymal Bag in its Ele-  
vation, will he more efficacious than the Syringe; for it con-  
tinually forces the Humour towards, its lower Orifice. Let the  
Outside of the Eminence he rubbed three times a Day with  
*Hungary* Water.

Let the Inside of the Eye he washed with hot Wine, in  
which you may .mix some Drops of the FriersBalsam. (See BAL-

**.SAMUM COMMENDATORIS).** Every Night, **let a Compress,**flipp'd in this Wine, be laid to the great Angle. Some People  
are cured .by this Method, when the Obstruction of the La-  
chrymal Bag is small, and the Os Unguis is not affected.

The Abbot *de Grace* has sometimes cured with his Plaister,  
Fistulas and Abscesses os the great Angle; he laid on a Plaister,  
that covered the whole Eye, for the. Space of a Month,-still  
wiping the Eye Night and Morning, and applying every Day a  
fresh Plaister. In any of the preceding Cases, when an Inflam-  
Iriation ofthe Lachrymal Bag supervenes, shod it should he caused  
by aFlux of Humours on that Part,che Patient must he let Blood,-  
and you must apply Remedies that will prevent the increase os  
' the said Afflux. The Pulp os a roasted Apple, mixed with the

White of an Egg, or Pulp of Cassia, .and a roasted Apple, of  
each an equal Quantity, mixed together, are very good.- If  
the Os Unguis be not infected, to cure the Ulcer, make use  
of the Plaister of the Abbot *de Grace*; at the same time you must  
take care to purge the Patient, as the Disease shall require.  
When you perceive the Matter in the Lachrymal Bag is changed  
to Pus, you must not wait the spontaneous Discharge of it ;  
Tor, by a long Continuance, it may generate a Caries in the  
circumjacent Bones;' for which Reason you must open it with  
aLancet, still observing the Direction ofthe Fibres os the Or-  
bicular Mincte; dress the Wound with the Plaister os the Ab-  
hot *de Graces* **See FISTULA LACHRYMALIS.** *St. Yves. '*

The Plaister above-mentioned is made os discusive, and some-  
restringent. Ingredients. - ' : - ' .

\* ANCHOAS, a Name which the-Natives of *Mexico* have  
for the Male Ginger, which differs from the Female, or corn-'  
mon' Ginger; in having rougher and thicker Leaves, with a  
greater and thicker Root,-which has a more acrimonious Taste,  
- with a kind of Bitterness. *Hirnand. -- - -*

si lts Place of Growth, and Virtues, are the same with those  
Of the common Ginger.'See **ZINGIBER.** *Raii HistcPlant,*' ANCHORALIS PROCESSUS, is the same aS the *Pro-  
cessus Coracoldes. -* **See CoRAcoiDEs..**

- 'ANCHUSA, a Plant thus distinguished : .

; ANCHUSA, Ossic. Chab. 516. - Park.Pared. 250. *Anchusu  
'Monfpeliana,* J.-B. 3. 583.Raii Hist. 496. *Anchusu puni-  
ceis floribus,* C. Β. Pin. 255. Boerh. fnd. A. T89. *Anchusu  
mitwrpurpurea,Pzrk. ThCzt.* 517. *Anchusu, Alcibiadicn,* Ger.

656. Emac. Soo. *Buglofsunt radice rubra, five Anchusu vul-  
gatior, floribus coeruleis.* Fount. Inst. 134. *Buglosssum radice  
rubra, five Anchusu vulgatior,* Elem. Pot. Ho. v *Buglofsum  
perenne minus, puniccis floribus.* Hist. Oxon. 3. 438. AL-  
KANET. *Dale. - \_ ? /*

ANCHUSA, by some called *Calyx,* by others, *Onoclea,* has  
Leaves like those of the sharp-leaved Lettice, hairy, rough,  
- black and numerous, lying round about the Root close to the

Ground, prickly. The Root is of a Finger’s Thickness, in-  
clining to a Blood-dolour, sends forth Shoots in the Summer,  
and stains the Hands ; it grows in a fertile Soil. -

The Root is astringent, and good for Ambustions, and old  
Ulcers, being boiled in Wax and Oil. Apply’d in a Cataplasm  
with Barley-meal, it cures the Erysipelas; and, anointed with  
'Vinegar upon the Part affected, cleanses the Alphus and Le-  
prosy. Applied by way of Pessary, it extracts the dead Child.  
The Decoction os the same is given to those who are affiicted  
with the Yellow Jaundice, and Infirmities of tlie Kidneys or  
. Spleen ; and if there he a Fever, it is mixed with Hydromel.

The Leaves, drank in Wine, bind the Belly. The Dealers in  
Ointments also use the Root to incrassate their Compositions.  
*Dioseorides, Lib.* 4. *Cap.* 23.

- Another *Anchusu,* which some call *Alcibiadeum,* or *Conochiles,*differs from the first in having smaller Leaves, though rough  
like them, and slender Stalks, which bear a purplish Flower.  
The Roots are Ted, os a good Length; and, about the time of  
Wheat-harvest, full of a Blood-like Juice; it grows in a sandy  
Soil. ; ...

' Both the Root and the Leaves are good against the Bites of  
-venomous Beasts, and especially os Viners, whether they be  
eaten, drank, (in Insuston) or worn aS an Amulet, eVen so far,  
that if a Person, aster chewing them, shall spit in the Mouth of  
a venomous Creature, he will kill it. *Idemib. Cap.* 24.

There is a third Species of *Anchusu,* like tho former, bearing  
a lesser Seed of a red Colour, which if a Person - chew, and  
afterwards spit in the Mouth of a Serpent, it will die. The  
Root, taken to the Quantity os an- Ounce and half, with  
Hyssop and Nasturtium, expels the broad Worm. *Id. Cap.0.esc*

The Root cleaves like the Papyrus; it stains the Hands of a  
thloody Hue, and prepares Wool to receive costly Colours. It  
will not dissolve in Water, but in Oil, which is a Proof of  
its being genuine. A Dram of it in Wine is prescribed for  
Pains in the Kidneys ; or if there he a Fever; in a Decoction  
of the *Balanus.* The Leaves, bruised with Honey and Meal,  
are applied to Luxations; and, drank to the Weight of two  
Drams in Mulsum, stop a Looseness. A Decoction of the  
Root in Water is said to kill Fleas.

There is another Plant like this, and therefore called the  
*Pseudanchufa,* and bv some *Enchusu.* or *Doris,* and manv other

Names, being more downy, and not so fat, but of a thinner  
and weaker Leaf. The Root yields no Oil, but a red Juice,  
by which it :is distinguished from *Anchusu.* The Leaves are  
applied to Hurts received by Blows. It expels the Poison of  
Serpents, and is drank also to drive out Thorns from the Flesh;  
The Magi order the Leaves to he pluck'd with the Left-hand, '  
and that you specify the Person for whom you take them, and  
then tie them about the Body as an Amulet,. against a Tertian. \*.

1 There is .yet another Herb, whose proper Name is *Onochiles ;*but some call it *Anchusu,*.others *Anebion, (oaicDnochelis,* others  
*Phexias,* -many name it *Enchufa.* It has a purple Flower,  
rough Leavesand Branches, a Root,, in. time os Harvest, of 4  
Blood-colour, at other times black; but it .is most efficacious  
in Harvest: The Leaves, bruised, smell like Cucumber. Three  
Ounces are a Dose for.the Falling down os the Uterus. These  
who carry is, they say, will not be hurt by Serpents.

Another Herb, like, to this, but less, has a red Flower,- and  
the same Virtues. . *Pliny, Lib.* 22. *Cap.* 2o, 21.

Anchusa and Cinnabar were used by the Antients, to give an  
agreeable Colour to’their Ointments; and where there was An-  
chusa used, they put no Salt to. prevent the Oil in those Com-  
positions from growing rancid. *Idem, List.* 13. *Cap.* I.

The. Root of Anchusa. 'was also serviceable in colouring  
Wood and Wax. *I detn. Lib.* 21. *Cap.* 16. - '

The Root of Alkanet is thick and woody, white within, and  
covered with a red Bark, which gives a red Dye or Tincture to  
any thing it is infused in: The Leaves are long, rough and  
hairy, in Shape like the common *Viper?s Buglosc*; the Stalk  
grows about two- Foot high, having many long narrow and.  
hairy Leaves, disposed in alternate Order. On the Top os the.  
Stalks grow the Flowers, thick set together in Bunches, os a  
purple Colour, smaller than Bugloss; each Flower consisting  
of a single Cup, divided at the Top into five sharp Segments,  
standing in a long hairy five-leased Calyx, in which, aster the  
Flowers are fallen,*; grow sour* longish Seeds. ..

It grows with us only in. Gardens, and.flowers *in-June. The*Roots only are used. . .. ...

v *Parkinson* highly .commends the Infusion of the Bark in  
*Petrolarum,* as excellent in fresh Cuts, .and green Wounds ; at  
present it in very little used. *MilleP s Bot. Oast.. . . st*

The common Alkanet,*.Anchusu,* Ossic. is brought from  
*Languedoc Rfal Provence,* .being the Root *osssaeBuglessecm Radice  
rubra,sive Anchusu vulgatior.* The Root is astringent, and proper  
in Haemorrhages of all Kinds. Apothecaries employ, it to colour  
- their Ointments, particularly the *Uuguentum Roscium y* het, for .  
this Purpose, it must be boil'd in Oil; for it does not readily  
communicate its Tincture to Water. The Antients used it as  
a Cosmetic, as is mentioned by *Galen. Geosseroy.*

. It contains a great deal *os* Oil, and a little Salt. -

It stops Fluxes of the-Belly, being made into a Decoction.

They bring from the *Levant* sometimes a kind os Alkanet,  
called *Alkanet of Constantinople. - ' .si*

. It is a kind of Root, near aS thick, or as large, as a Man's  
Arm, but os a particular Figure; for it appears a Collection  
of great Leaves, twisted like a Roll of Tobacco, of .different  
Colours, but generally of an obscure Red, and os in very fine  
Violet. There appears at the Top of this Root a kind of white  
or bluish Hoariness. They find in the Middle a Heart, which  
resembles a thin Bark, roll'd up like Cinnamon, *of* a fine Red  
without, and White within *: In* Appearance, the Root looks  
as is it was artificial. .But whatever it he, it yields a finer  
Tincture than ours. *Lemery des Drogues. so ’*

ANcHUsA **LuTEA,** Ossic. Ger. **656.** Emac. 8οο. .J. B.  
3. 583. Raii Kish I. 497.. *Anthufa lutea major.* Park. Theat.  
515. C. Β. Pin. 255. *Anchusu lutea rarior et elegantiae,*Chab. 5I6. *Symphytum Echii folio ampliore,, radice rubra,*Elem. Bot. 114. *Symphytum Echii folio ampliore, radice ru-  
bra, florerluteo,* Tonm. Insh 138. 'YELLOW ALKANET.  
. There are three Species os Anchusa described by *Dioseorides ; .*but whet Plants they are, is not agreed among Authors, one  
naming this, another that. *Ceefalpinus* and *Thalius* call the  
common Vipers Bugloss by this Name. *Turner, Dodonaeus,*rand.*Cordus,* refer, two os the Species To. Bugloss, sor what  
Reason, I am a Loss, fince the characteristic Mark, which is  
the Root’s staining the Hands with a Blood-colour, belongs to

'neither of them.' . ' ’

The more modem Botanists acquaint us with several Species  
of this Plant : Those two, which I heve here given, I am of  
Opinion, with *C. Bauhine,* are the second and third Species of  
*- Dioseorides,* whose-first seems to be. only4 larger Sort os the  
.second. *-Dale. . . -* ... ... . . χ

ANCHYLe, the same as ANcYLE, which see.

ANCHYLOPS, the same aS *Anchilops.*

ANCHYLOSIS, the same as ANCHyLE, ANcTLE, or  
ANCYLOSIS, which see. ....

ANCHYNOPES, a Name for the *Phtaenix,* or *Ray’-gras.s, .  
in Oribasius, Med. Coll. Lib.* I2.

1 ANCHYROIDE6. See **CORACOIDEs. :**

ANCI, in *Greek, Tecrietsucsves, ilAeasel-elbrusd, sromyar^,  
alViasol,* andsewedv *an Elbow.* So *HiiAcccraies* calis those.

who, from nipping of the Head of the OS Humeri into the  
Ala, have an Arm shorter and smaller than it ought to he, and  
**the** Cobit, or Elbow, of a Weasel, whence they are called by  
some *Mustelanei,* which fully expresses the *Greek* Word; or  
barely *Anci.*

The Disorder that gives Occasion to the Name, happens  
either in the Womb, where the Os Humeri suffers a Luxation  
from too much Moisture, or in tender Years, by means of an  
Abscess deeply seated about the Head of the Os HumerL *Foe-  
sius.*

- ANCINAR, Borax. *Rulandus.*

ANCISTRON, Ἄγκιστραν, a Hook.

ANCON, ’Λγκῶν, the gibbous Eminence, or Flexure of  
the Cubit,- the Middle of that Eminence, on which we lean,  
heing the greatest of the- two Apophyses of the Ulna, and the  
same with the *Olecranon. Castellus, Winstmu.*

ANCONEUS MUSCULUS. It arista by a roand and  
short Tendon from the Back-part of the external Condyle of  
the OS Humerij this soon, grows fleshy, and is so intangled  
with Part Of the Brachiseus Externus, that there can he no  
separating them without Violence.

It is inserted fleshy and thin into the Lateral Part of the Ulna,  
a few inches below the Olecranon.

Its Use is to assist in extending the Cubitus. *Douglas.*

ANCORA, Calx. *Raland. Johns.*

ANCORALIS, the same as ANCHORALIS.

ANCOSA, Dacca. *Ruland. Johns.*

ANCTER, Ἀγκτήρ, the *Greek* Term for a Fibula, or But-  
ton, in Surgery, by which the Lips of Wounds are joined  
and held together, *Celsius, Lib. 5. Cap.* 26. winch Operation  
is called *Ancterias.mus,* Ἀγκτηριασμάς, according to *Galen.* See  
**FIBULA, and SUTURA.**

ANCUBITUS, an old Tenn, by which was meant'that  
Affection of the Eyes, in which they seem'd to contain Sand, or  
small Pebbles. It was also called *Petrification* by *Johannes  
Anglicus. Castellus.*

ANCUNULENT.il. Women are so called in the Time  
**of** their Menstruation, as contracting *Inquinamentum* [Pollu-  
tion]. *Festus.* From the *Greek* Κονις, .comes the *Latin  
Caenum,* from whence are derived *Cunire* and *Inquinare.*

*Ancunulenta* is compounded of *Am* sor Ἀμφἰ, and *Cunio quasi  
Tsoovtda, Inquino,* to pollute.

- ANCUS. " A Name for such as have an Arm bent crooked,  
" so that they cannot extend it." *Festus.* From Ἀζκῶν, an  
Elbow, according to *Servius.* " Ancus, mancus, κυλλός,  
λορδός.ἔ' *Vit. Glossarium. . Farro* takes it for a *Sabine* Word,  
but it is certainly derived from the *Greek 'majekia* which signifies  
the Bending of the Arm. The *Greeks* also use Γαλιαγκῶν,  
sGaliancon] for Ancus. See ANCI. *Baxter's Glosiarium.*

ANGYLE, and ANCYLOSIS, from 'Αγκύλος, crooked.  
**A** Distortion, a Fixation ( κατοχή ) of the Joints, caused by a  
Settlement of the Humours, or a Distention of the Nerves.  
*P. AEginet. Lib. An Cap.* 55. *Actuarius, Meth. Med. Lib. An  
Cap.* 16. .

In this Case, Remedies Of a mollifying and relaxing Nature  
are required; in general, such as are appropriated to Scirrhosi-  
ties, or rather, to Resolutions of the Parts. Particular Medi-  
dicines are, a Perfusion of Water and Oil, in whichthave heen  
boiled Lindseed, Foenugreek, Marsh-mallow, Bay, and Root  
of Wild Cucumber, and *Sycaonian* Oil. .After Perfusion, pro-  
per Applications may he made of some of the more simple  
*Acopa,* for instance, that prepared of the black Poplar, and  
another of Fin, or the *Bromion, Aristophaneum, Ananita,  
Lysiponiurn,* or *Varium.* Proper PlaisterS are that os *Amythaon,*the *Anicetum,* and the following, which is excellent :

- Take of Bdellium, Fat of a Calf, Gum Ammoniac, *Illyrian*Orris, each sixteen Drams , of Opopanax, Galbanum,  
Rosemary-seeds, Styrax, Frankincense, each eight Drams.;  
Grains of Pepper, one hundred and sixty; Wax, half a  
Pound.; Refin Of Turpentine, half a Pound; Dregs of  
Oil of Orris, a sufficient Quantity; Wine, a sufficient  
Quantity, beat them up together.

This also makes a good *Acopon,* moistened with *Unguentum  
-Irinum, Cyprinum,* or *Laurinum.* Of a middle Nature, he-  
twixt Acopa and Plasters, is the compound *Pharma con  
i Perna.*

Your Acopa must he used hy long and gentie Affliction, to-  
gether with Endeavours to bend and stretch the affected Joint.  
*Paulus AEgineta, ibid.*

The Malagma of *Euthycleus* for Joints, for all Sorts of  
Pain, and particularly in the Bladder, and for Contractions of the  
Joints, after they heve been newly cicatrized, (which the  
*Greeks* call ἁγκήλαι) consists of

Soot of Frankincense, Rozin, half a quarter of a pint.  
Galbanum without the Branches, an Ounce and an half;  
Gum Ammoniac, Bdellium, of each one Dram two  
Grains and an half; of Wax, one Dram thirty-three  
Grains.

Another Malagma is thus prepared:

Take of Orris, Gum Ammoniac, Galbanum, Nitre, o‘f“  
each one Ounce six Drams thirty-five Grains ; Liquid '  
Rozin, fix Drams-fifteen Grains , of Wax, two Ounces .  
two Semples. *Celsius, Lib. 5. Cap.* I 8.

I don’t well understand whet *Celsius* means by *Fatigo Thuris,*unless the Soot arising from Frankincense, when burnt in  
Temples as Incense. . '

When a Joint, or Articulation of the Bones, grows stiff,  
and the peccant Matter there setties and hardens, which Diss,  
order the *Greeks* call *Ancylosis,* if it proceeds from an Effusion  
and Concretion of the Juices of some broken Bone, the Cure,  
in such a Case, will he Very difficult. But if this Stiffness bo  
the Consequence of too long a Rest, or the' Inspissation of the  
Humour which lubricates the Joins, it may not he altogether  
unseasonable to ply the Part affected with emollient Foment\*..  
ations, and Bathings often repeated, especially the natural  
Baths; to be often rubbing it throughly with Oiis, Fats of  
Animals, or mollifying Ointments, and with your Hands to  
move and inflect it this way and that way, till its former Flexi--  
hility be perfectly restored. *Horsier. \**

The following Case is'related by *Nsc.Maloet* in the Memoirs .  
Of the Academy of Sciences for I72S.

A young Man, three-and-twenty Years of Age, had, for  
more than a Year past, his Leg quite hent backwards, with-'  
out heing able, in all that time, to extend it in the leash He '  
felt great Pains in his Knees, winch were more acute at some  
Seasons than at others, but sometimes were so Violent, that  
when he was in Bed, he could not bear the Weight of the Bed-  
clothes on his Knee, insomuch that, during four Months, he  
was obliged to support them with a Hoop, to prevent their  
touching him. Though these Pains were much less trouble-  
some at certain Seasons, they were always felt, if any Pressure-  
was made on the affected Part, and rendered him incapable of  
using a wooden Leg, which, through the Compression which  
his Knee must have suffered by resting on it, would not have  
sailed to render his Pains more acute. ‘ '. ’ *- . ' r*

He was no less incapable os walking by the Help of two  
Crutches; sor whenever he attempted it, the Weight os his  
Leg made him endure insupportable Misery in his sum. He  
had tried to. free himself from this Inconvenience, and from  
the Necessity of keeping his Bed, by the Help of a Swathe ;  
but as this Expedient did not secure that Part sufficiently im-  
moveable, it did not ease him in the least os his Sufferings.

The Surgeons in the Country, who passed for Men of Skill,  
being persuaded that it was an Ancylosis, in which the Leg  
and Thigh were ossis/d together, had for a long time used ,  
several Sorts of Remedies in Vain, till at last, aster several-  
Consultations held upon the Assair, they concluded, that no  
Other Method was to be taken but Amputation of the Thigh.

Some Persons of Consideration, who commiserated the Pa-  
tlent’s Case, prevailed with him to let hsmself be brougot. to  
*Paris,* in Hopes that he might there find such Relief as would  
save him froth coming to that Extremity.

Being arrived there in the Month of *September* last, he con-  
suited the most experienced Surgeons in those Sorts of Maladies,  
They were of Opinion, there was no other Remedy for him  
but cutting off his Thigh, χ - .

He was so disheartened at the sad Condition to which he was  
reduced, and sometimes felt such exquisite Pains, that at last -  
he made his Choice, and determined to undergo the Operation-  
As the Success was doubtfid, and he must run a Hazard of his  
Life, the Surgeons, thy., a wise Precaution, had given Notice to  
the Vicar of the Parish, that he might administer to him the  
Sacraments; and because I had an Opportunity to Visit the Pa-\_  
tient, they made me acquainted with the Resolution they had  
taken Io perform the Operation, as a ching liable to no Ob- "  
jections, with an Intent only, that I should prepare him for in  
by Purgations, and other Medicines, as I thought proper.

Thinking myself obliged to examine into the Disorder which  
gave Occasion for the Amputation of this Thigh, I had the  
-affected Part uncovered, and found, that of the two inferior  
Condyles of the Os Femoris, that on the Inside was a little  
thicker than it ought to be, as well as the Inside of the superior  
Extremity of the Tibia. This Thickness was not painful, not  
even when it was pressed ; and the Pain which the Patient felt  
at his Knee, was directly at the Place of the Ligament which  
fastens the Patella to the Tibia. I observed no Tumour in the  
Flesh; on the contrary, sse Leg was considerably wasted.

The’ the Excess in Bigness, which I had observed in that  
Knee, did not appear to me of Bulk sufficient to be the Cause  
why the Patient could not in the least extend his Leg, yet if  
we may judge from, whet usually happens, it might proceed -  
from some disorderly Situation of the Heads of the Bones, in  
Consequence *os* which they might have been solder'd together  
- by a Liquor, diffusing itself at the Joint, and by its Inspissation  
.conglutinafing them in such a manner as of two Pieces to make  
but one ; a Disorder but too common,‘and the Cause why

were shrunk backwards, and to produce the Effects which L  
had in View, as well on account of its Heat and Fluidity, as.  
of the volatile Parts with which it would he impregnated.

After feme general Remedies, which I gave the Patient, I  
order’d a Bath of this Kind. He went into it twice a Day,  
and stay’d there an Hout, or an Hour and an half, each time  
(Observe it was a whole Bath, which, acting equally upon  
the whole Mass of Blond, was much more efficacious than **a**Semicupium). At the fourth Bathing the Patientis Leg hegan  
to extend itself, and contioued so to do in such a manner, that  
the eighthTime, when he got out, he set bis Foot to the  
Ground, and was in a Condition to walk with two Crutches.

From that time the Pain of his Knee went css, and he never  
felt it since. After bathing seven Days, that is, fourteen  
nines, I ordered him Rest, and even during that Rest his Leg  
extended itself more and more, and at last equally with **the**other, so that he hed no Need of Crutches, but was obliged to  
use a Suck in walking, because he hed still a Pain in his Harn;  
when he stretched it out. When he walked, he felt a Pain in  
the upper .Part of his Foot, which I imputed to the Inaction  
in which he hed heen for a long time, by which some of the  
Parts had acquired a Dryness, or a Stiffness, which put them  
out of a Condition of readily complying with the different Μο-  
tions necessary for walking.

To remove these Symptoms, I ordered Embrocations under  
the Ham, and upon the Foot, with Oils of Earth-worms, and  
SL JohnS-wort, mixed in equal Parts. By the Ufe of there  
Remedies for ten or twelve Days, the Motion of his Foot be-  
came less painful, and that of his Leg more free. 1

Mean while, as there still remained some little Stiffness in  
the Tendons of the Muscosi Flexores of the Leg, I judg’d it  
proper for the Patient to repeat bis Bathing, after purging him  
again. At the End of sour Days sinding him fatigued, I made  
him intermit it; and in short, after a Rest of fifteen Days, **I**made him repeat it for six Days, twice every Day- **He**bore it very wed, and was perfectiy cured ; so that from that  
Tube he has felt no Pain in his Knee nor Foot, except forne-  
times after be has walked a great deal. He stretches and bends .,  
his Right Leg as easily as his Left, he walks and runs without  
Caneor Stick; in short, since he has been cured, he has em-  
ploy’d himself in clearing a Garden, tho’ he is able to five  
without it, and spent his Time in carrying Earth and Stones;  
and doing other Workeof that Nature, without seeling any .  
Inconvenience. - *r ' :*

. However, tho\* his Right Leg has recovered much of its Flesh,  
it has not yet attain’d to the Bigness os the Left, .and his Knee  
always appears *si* little bigger than the other. This proves,  
that it was. not this Excess in Bigness that held his Leg thus  
hent, and hinder'd its Extension. , '

The Leanness of this Leg might he imputed to the Alteration  
that its Flekion, which lasted above a Year, produced in the .  
Tubular Vessels appropriated for the Conveyance of nutritive  
Juices to that Part. Those Tubes, instead of strait, as they  
commonly are, becoming very much bent, and by that means  
incapable of receiving, and consequently of supplying the Leg  
with a sufficient Quantity of those Juices, which octofron’d its  
Leanness, grew narrow and streigbten’d ; wherefore, though at  
prefent they have their first Direction, the. Leg, has not. been  
able to recover its former good Plight; because they heve not  
as yet resumed their natural Diameter. . -

With respecti to the Bigners which remains on the Ioside Os  
the Thigh, I don’t think, that we ought to regard it as an  
Exostosis of a hed Kind, that is, which was produced by a De- ,  
pravation of the nutritive Juices, which had altered the Sub-  
stance of the Bones; because they appear to be in their naturaI  
State, and the Bigness there observed is without Pain, Softness,  
Redness, or Swelling ofthe Skin, and does not incommode the  
Movement os the Articulation, which is a. Symptom, that, for  
the most part, attends Exostoses of a had Kind.

This Bigness then ought to he imputed only to a greater  
Quantity of nutritious Juices with which that. Part was sup-  
ply’d, whether Owing to some natural Disposition, as we fee  
in those Persons who heve naturally one Part bigger than an-  
other; or to some Blow or Fall; or, lastly, to the bending  
Posture in which that Leg contioued for so long a time, which  
State of Flekion, having been capable of making way for the  
Leanness of the fleshy Parts, might also he the Occasion of this  
Excess in Bigness of the bony Parts. These two Effects, tho\*  
contrary, may proceed from; the same Cause;. of which wo **see**an Example in the Rickets, where the Heads of the Bones in-  
crease considerably, while the fleshy Parts first to Decay. But  
that we might give a Reason adapted to the Subjects let us sup-  
pose, that the Blond not having been capable of flowing in so  
large a Quantity as usual, in the Arteries which supply the  
Leg, hecause of their extreme Curvature, as I said just now,  
was obliged to stop at the Knee, in Consequence of which the  
Extremities of the Os Femoris and the Tibia having received a  
greater Abundance of Lymph,. the fame afforded a greater  
Quantity of nutritious Juice to those Parts of them which were  
most disposed to receive it. - ' .. ..... . .

is

none of the solder'd Bones thus united can any longer stir with  
its proper Motion, nor consequently play in their Artioulations.  
But as I had made no such Observation on the Knee of this  
Patient, whatever Efforts, he made toosiretch out his Leg, I  
was willing to he assured, whether any such Cause operated in  
the present Caso

For this End I endeavour’d to extend the hendedLeg, by  
snaking an Effort to pull it out strait with my Right-hand,  
while I kept down his Thigh with my Lest. I observed, that  
the Leg hended, the’ indeed it was not without Difficulty on  
my Part, and Pain to the Patient. Wherefore I made no  
greater Efforts to extend it more, as well hecause I was per-  
suaded, by the Resistance which I sound, that I should hardly  
accomplish my Design, aS becaufe I was unwilling to increase  
bis Pains, and render them iofupportable. However, since the  
Leg return’d to its former State of Flexion, as soon as it was  
left at Liherty, and I believed it was of Importance to he  
assured, whether the Leg had this Motion in common with the  
Thigh, I repeated at several times my Efforts to extend it,  
and always with the same Success.

: I was then persuaded, that the Bones were not soldered to-  
gether; for in that Case not only the Limb has no more Play in  
its Articulation by its proper Organs, but it is also impossible  
to procure it by any outward Assistance, either in extending it  
when it is bent, or bending it when it is extended, unless the  
Bones should unsolder, or break, neither of which, I was fure,  
had happen’d by the Efforts I had made.

: I was obliged then to search somewhere else for the Cause  
**which** held the Leg in this Posture of Inflection, and quite dis-  
abled the Patient from extending is. .

- I examin’d the Tendons of the Mufcull Flexores, and found  
they were extremely tense, and drawn back towards their Ori-  
gin. I was satisry’d there needed no more to hold the Leg in  
this inflected Situation, and thought I had discover’d the Cause.  
But in order to be better assured, if it were possible, I question’d  
the Patient about the Manner in which this Disorder happen’d  
to him, in Hopes to procure some Light from thence.

He told me, that in the Month of *Augast* 1726. he bad a  
Fever, which lasted forty-five Days, the first fifteen or sixteen  
of which he hed fain under a Delirium; that during all that  
Time, be struggled, and would heve come out of his Bed, so  
that they were forced to de him in it; that he had found  
means to untie himself, and to throw himself out of Bed upon  
the Floor; that he had heen blooded seven times, four tones  
in the Arm, and thrice in the Foot; that he knew all this to  
he true, because his Companions hed related it to bain, when  
he was corneto himself; that then be perceived bis Right Leg  
was quite bent, since .which Time he could by no means  
stretch it out, whereas before it hed always been as the other ;  
that he had never felt any Pain in his Knee, nor felt any thing  
extraordinary, till this Time. \_

This Account did the Patient give me of the Condition he  
was in when this Disorder of his Knee seiz’d him; and I be-  
lieved, that I had Reason to conclude, that the Illness, of which  
he gave the Particulars, was a continued Fever, attended with  
a Delirium ; and as such a Symptom is accompany’d with con-  
vulsive Motions, of which it is usually the Caufe, I judged  
from this Relation, that the Tension which I observed in the  
Flexores Musculi of the Leg, might well he the Consequence  
of a Convulsion of those Muscles, at the Time when the Pa-  
tient was under the Delirium; in Consequence of which they  
might continue thus shrunk back by means of some Matter,  
which was capable, by swelling them, of keeping them in this  
contractsd Condition, and was of a Nature not fitted to dis-  
perfe, either of itself, or by the Remedies hitherto tiled.

Whether this Reasoning he just or not, which I propose  
only as a Conjecture concerning the Origin of a Disease, of  
which I never saw the Beginning, I was persuaded by the Pa-  
tient’s own Account, and by what I ctiserved of his present  
Condition, that the Reafon why his Leg was thus inflamed,  
and incapable of being extended, was because the Flexor  
Muscles were shrunk back and shortened.

- Far from considering the-Disorder as incurable, on the con.  
trary, L believed .it was .very easy to he cured. Wherefore I  
opposed the Amputation of the Thigh, and set myself to think  
of some Remedies, by which I might cute the Patient, and at  
the same nine preserve his Limbs intire.

In pursuance -of the Notion which I had formed of the.Dii:  
order, I proposed to myself the mollifying and relaxing of the  
Fibres of the' Muscles, which by their Contraction held-the  
Leg bent, that I might give them that Suppleness which they  
wanted, in order to extend and stretch themselves out .at fust  
Length: I proposed, to myself allo the Dissolution and Discus-  
sion of the Matter which might he lodged in their Interstices,  
and, by-keeping them swelled, hinder'd their Lengthening or  
Extension.

I thought I should endeavour to aofwer these two Indica-  
tions ar once, and that I might succeed, by putting the Patient  
in an aromatic Bath of hot Water, which feemed to **me the**most proper Means for penetrating to the very Mufcles, which

It may he said, perhaps, thet tho’ there be no Room to  
doubt,' that the Contraction of the Mufculi Flexores of the  
Patient’s Right Leg was the real Cause that held it thus hent,  
it is still uncertain whether thet Contractson was the Conse-  
quence of a Convulsion of those Muscles, or of a Resolution of  
the Extensores of the same Part. that this last Disorder might  
equally make way for the Mofcoli Flexores of that Leg to  
hend it, and to keep it in that State of Flexion, as long as it  
subsisted ; .'and that in this Cafe .it might alfo heve heen cured,  
by the Remedy which was ufed ., and upon thefe Accounts,  
the Disease which I attribute to one Cause, might perheps he  
imputed to another quite opposite.

" .1 answer, that ’tis true a Member may as well be hent in  
Consequence of a Resolution of the Mufcles which serve to ex-  
tend it, as by a Convulsion of those which , are appointed to  
bend .rt; that whether their own Force increases, or that of  
their Antagonists diminishes, they equally exert themselves be-  
yond their just Bounds, and must by Consequence keep .the  
ran bent,-or instectsd : But besides that we feldom or ever  
see a Delirium coofequent upon a continual Fever attended  
with.a Resolution, instead of which a Convulsion is the ordinary  
Symptom ; I .have observed this Difference betwixt a Member

, . hent in: Consequence of a Resolution os its Musculi Extensores,,  
and a Member bent by a Convulsion os its Mufculi Flexores ;  
that in the first Cafe,' a Force equal to that of the Musculi Ex-  
tensores. might perfectiy extend the bended Part ; -that but a  
small Resistance is to be perceived from the Musculi Flexores,  
and thauthe Patient cannot in. the least suffer from thet Exten-  
sion ; but that,- instead thereof, in the second Cased the greatest  
Force cannot altogether extend the bendedPart, and that there  
is an invincible Resistance to be perceived on the Part of the -  
Mufculi Extenfores, insomuch thet aMan would run the Risk  
of breaking or tearing them asunder, if be should - endeavour  
with alibis Forced to extend them to their full Length ;-and in  
such a. Case, the least Extension would put .the Patient to'great

’ Pain..,' .. . . so **u -** *. .. ' c ..... ;*

, - Thus it happened exactiy in .the. present Case : Withull the  
Efforts which. I made .to .stretch out the bended Leg, I came  
very short of extending it to.the utmost, finding too much. **Re-**fistance. ’Tis.tr.ue,. the Pains which the Patient felt oh this  
Occasion, prevented me from using greater Force; arid I have  
heen told, that a Surgeon os an Hospital in thet Country, hav-  
ingtry’d to extend.this Leg to 'its .sell.Length by Strength, had  
employ’d two or three Men for that Purpose, and :was Dot able  
to accomplish his Design, the Manshaving fallen into a Swoon,  
which lasted halfa Quarter of an Hour:: :'rss .-'i 1  
, These are the Reasons why I judged, that the Contraction of  
theMusculi Flexores of the Patienrfe Leg was not the .Conse-  
quence of a Resolution of the Mufculi Extensores, in ,  
r The Result of this Observation is, that we ought not always  
to look upon:those Symptoms as the Causes of a .Disease,  
which, though they, are often fo, might yet, for. all thet, be  
sometimes the Consequences of. it; and that in Distempers,  
even.thofe helonging to Surgery, we are not always to miy onthose. Signs which ate the most ufiial, and which appear the  
mostnatumi, if possibly they may deceivesis. Of this Nature  
was the Bigness, of this Patient’s Knee,'the Pain which he felt,  
the Absence orEailute os a Turnour in the soft and fleshy Parts,  
iheinrpossibilityche-lay under of extending his Leg in the least.  
All this seem’d to .indicate, and commonly shews, A Fault in  
rhe Bones, which-gives: Rise to all these Symptoms ; but which  
**were,** for all that, the Effects of another Cause; . ' . "

- The Passion which foine Surgeons in the. Country heve for  
Operations, makes them take all Opportunities of cutting off a  
Limb.: Such may learn from the preceding Case, drat it is  
never to be done rashly. Reason and Humanity should also in-  
form them, that , there-is more Reputation and Satisfaction to  
be. acquired by during one, than amputating a thoufand. .

When an Ancylosis is perfectiy form’d, that.is, when **the**Bones;arerossifyid -.together, it appears by the.Nature of the  
Distemper,, that the Cafe is incurable. But when the Stiffness  
is only caused by Humours inspissated in the Articulation, the  
Methods specifyld in . the preceding History, and the two fol-  
lowing Cafes from *Le Dram,* seem to promise fait for a Cute,  
if duly persisted in. .. - -'.

-- Hot Pumping is a Remedy very, these used ; whether it he for  
want-of knowing its Advantages,. or from the Difficulty of per-  
forming it properly, which has often rendered it unsuccessful.  
Jt is very beneficial, however, in many Cases, and especially  
in Anchyloses, before .they arrive to a perfecti Hardness. A  
Series of Time is required before jt: can produce any consider-  
able Effects And it must he often repeated, when it begins to  
operate, .having frequently proved unsuccessful, for want of be-  
ing long enough continued. ; . ... . j

.- In the Month .of *January* 1725. a Man aged twenty-one  
-i ears felt an acute Pain in. his Lest Groin, whichsubsisted in  
the. same Place during .the Space, of a Fortnight, and then  
removed its Situation. It varied often, affecting the Thigh one  
iimc.. and. the.Ronila..another, .and .then returned to its fust  
Paint again. ’After he was bled and; purged, they, bathed the

Part with Lavender-water for above three Weeks. The Patient  
finding no Relief, but on the contrary, that his Leg and Thigh  
were emaciated, be declined the Use of it, and put himself un-  
der the Hands of several Empirics for near three Months, who  
robbed him of his Money, without doing any Service. These  
Gentlemen (according to themselves) heve infallible Nostrums;  
het if they are so, it consists in draining the Patients Purses,  
who place a Confidence in them. The last Remedy he used  
was dry Baths, fuch as are performed with Spirit of Wine ;  
which heing attended with the fame Success as the former, he  
applied himself to me.. ' ...

- When I first faw him, he could not move his Thigh with-  
out violent Pains, nor suffer the least Violence to he ufed in  
moving it.; the superior Part, to the Spine of the Ilion, was so  
prodigiously swelled, as to be twice its ordinary Magnitude. It  
was exceedingly distended, and as hard as a Stone ; the Pain  
was very deep, but not augmented, when the Turnout was  
handled.. :

.. What increased the Bulk of the Thigh to thet Extent in its  
superior Part, was, probably,Ἀ large Quantity of Lympha in-  
spissated and hitratedin the Interstices of the Muscles; perheps  
Also the/Capsula, embracing .the Articulation, was filled  
with Sinovia, as well as the Cavitas Cotyloides. The Projec-  
tion of the Trocanter Major externally afforded forne Reason  
to believe, that the Thigh was luxated (This Sort of Lu-.  
Nation is often seen from an internal Cause, whereby the Head  
of the Femur is gradually thrust out of its Cavity). The in-\_  
ternal Part of the Thigh was emaciated to such a Degree, thet  
the Bone seemed th be covered only.by the Skin, and might he.  
embraced with one Hand. The Leg was emaciated also.

' Seeing the Inutility of all the Remedies hitherto employ’d, **I**advised the Patient, to go to *Bourbon* to try the Hot rump,  
which be bad not yet attempted. He told me the Impossibility  
there was of undertaking that Journey, both because his Cir-  
cumstances could not afford it, neither would the Excess of  
his Pains suffer him to he moved. This gave me a Thought  
of erecting a Pump at my own House, which might, in some,  
measure, answer the Use of the Hot Mineral Waters, and.  
sirpply the want of them.

**; The** Place being prepared with all necessary ConveniencieS,  
I put the Patient into *Ca Charite,,* from whence I could re-  
move him every Day .to my House. I ordered himto he twice  
bled and purged, and the I 2th of *August* began to pump upon  
him for the Space, of an Hout ; and when it was finished, he.  
wentto bed, where. the whole Part asspered was covered with  
Bladders,, half silled with hot Water, to a supportable Degree.  
These Bladders were often renewed in the Space, of two Hours,  
and when they were removed, the Part was suffered to perspire  
another Hout, covered only with warm Linen. Then, the  
Patient was brought back to Za *Charite,* where the Bladders  
were again renewed in the Evening. .. ...

: When he had heen pumped a few times, he began to lean  
upon his Leg with less Pain, but .always by the Assistance of  
Crutches, and without any Motion in she Articulation.

i .The Part affecied sweated considerably at each Pumping,  
and appeared much foster after it. - The Patient had not ufed  
this Method above a dozen rimes, but the Swelling on the fupe-.  
tior Part .of the Thigh began visibly to diminish. Then I or-  
dered the Motion of the Articulation to be gently forced, not-  
withstanding the Pain, the’ by Degrees, and a little at a time,  
moreover, I purged him twice.. These. Precautions, united  
with, the Pumping, dissolved the Sinovia, so thet the Patient  
could move his Thigh a little without any Assistance. In pro-  
portion as the Tumour diminished, the Leg and Thigh grew  
more fleshy ; in short, within the Space os four Months, during  
which he was pumped between forty and fifty times, suffering  
him now-and-then to repose a Day or two, the Distemper *st,*for yielded, that the Patient was able to walk very fast by the  
Help of a Cane only, feeling no more Pain, and having this  
Leg and Thigh answerable to the other. ,

Jn the Year I728. a Gentleman, belonging to the King, bed  
an inspissated Sinovia upon his Right Foot, which not only pos-  
sessed the Articulation, but spread over the whole Foot, so thet  
the Anchylosis was almost formed.

As he was ready to depart for *Bourbon,* to drink the Waters,  
by the Advice of MI. *de laPeyronnie,* they mentioned the Pump  
I had creeled at my ownHouse., and having view’d it, the Pa-  
tient was prepossess’d in favour of the Effect it might produce,  
and deferr’d his Journey for several Days to experience it.

-Twelve Pumpings, with the same Precautions observed in  
the preceding Case, so far cured him, thet he laid the Thought»  
of .hisJourney aside, and has felt nothing since.

**EE Μ A R K S.**

We ought not to he surprised at the sudden Effeolt of Pumping,  
properly managed , three things aol at the fame time upon

. the stagnated and inspissated Fluids -

First, The faffing of a Column of Water, os an Inch Diameter,  
from feven or eight Feet high, abrades and comminutes the

. . inspissated Juice5, by its Force and Compression.

Secondly, The Nature of the Water may contribute to prodded  
this Effect, if the active Particles Contained in it can he immit-  
ted into the Texture of the Part affected: And is there any  
' thing that can sooner make it penetrate, than the precipitate

Fall os a Column os Water upon it ?

' Thirdly, The Heat os the Water, which infinuates itself into  
the Part affected, and warms it to the Very Bottom, assists  
and accelerates the progressive Motion of all the Fluids; per-  
haps eVen the intestine Motion of such aS heve not entirely  
lost it, and communicates a Motion to those that are stag-  
nated.

From hence it follows, that one Part of. the stagnated Fluid  
transpires externally, whilst another takes the Course of the  
Circulation ; and thus the Part is gradually disengaged. It  
is true, indeed, that every Patient does not receive the same

, Reliefbut if the Distemper begins to give way after a few  
Pumpings, the Number is not to he regarded. Several Per-

- - sons who have reap'd no Benefit from the Pumps at *Bourbon,*and other Places, have return'd unrelieved, for want of using  
It often enough, independent of other Obstacles opposing **the  
Cure.** So far Tin *Dran.*

**I** must not dismiss this Article without observing, that though  
AncyIe, or Ancylosis, are usually taken for a Union os the  
Bones at the Joint in general; yet Ancyle, or Ancylosis, pro-  
perly imports a Stiffness of the Joins, when the Part is fix'd  
in a bended Position; whereas when it is strait, the Disorder  
is call'd Orthocolon, ὸρθόκωλον.

ANCYLIDOTON, ἀγκυλίδωτον. The Word is used by  
*'Hippocrates,* and signifies, according to *Galeofs* Interpretation,  
ἀγκύλην ἔχοντα. Things that have a Handle.

. ANCYLOBLEPHARON, from ἀγκήλος, bent, and βλε-  
φαρον, an Eye-lith A Disease of the Eye, which doses up the  
' Eye-lids.

' Sometimes there is a Coalition of the Eye-lids, fo that the  
**Eye** cannot he opened; and, what is an usual Accessory to the  
Disease, a Cohesion of the Eye-lids with the White of **the**Eye, which is owing to Carelestness in the Cure of an Ulcer  
affecting either of the Parts; for, as the Sore heals, whet might  
and ought to he separated, will, if neglected, be glued toge-  
ther. The *Greeks* call both Affections άγκυλ’ι^λέφαρον.

When there is only a Cohesion of the Eye-lids, they.may  
;he easily separated, tho' sometimes to no Purpose, for they will  
unite afresh ; however; we ought to try; because it often suc-  
ceeds, Introduce therefore the Specillum, with the blunt Side  
towards the Eye, and with it separate the Eye-lids; after winch  
lay some small Pledgets hetween them, till the exulcerated Place  
'he heal’d.

so'. But when there is on Adhesion of the Eye-lid to the Very  
White of the Eye, *Heraclides* the *Tarentine* advises cutting at  
the inferior Part of the Adhesion, the sharp Edge of the Knife  
heing turn'd upwards; but with great Tenderness, that we may  
avoid cutting off any thing from the Eye or Eye-lid; but, if  
necessary, let it be rather from the Eye-lid. After this, the

s Eye must he anointed with Medicines proper to cure Asperities,  
and the Eye-lid must he turn'd up every Day, not only that the  
Medicine may have Access to the Ulcer, but also that it may  
not again adhere; and the Patient himself must be charg'd to  
raise it often with his two Fingers. I don't remember, that ever .  
any one, by this Method, recover’d ; and *Meges,* in his Wri-  
tings, owns; that he had try'd many things, but never once suc-  
ceeded; because the Eye-lid always stuck to the Eye afresh.

*. Celsus, Lib. fr Cap.* 7.

The upper Eye-lid sometimes grows to the lower, sometimes  
\* to the *Tunica Adnata,* and sometimes to the *Cornea.* This  
Disease is an Impediment to the Function of the Eye.

in this Case the Coalition must be dissolved, either by pass-  
ing a Probe finder the whole Eye-lid, or by first distanding it  
with a Hook, and then using the Pterygotomus; taking care  
not to wound **the** *Cornea,* led it should occasion a Falling out  
of the Sight. .

After the Section, and Infusions into the Eye, the Eye-lids  
are kept asunder by the Interposition of Lint, lest they should  
Sow together again j then we apply Wool moisten’d with an  
gg [ώοβραχὲς] ; and; after the third Day, cany on the Cure  
with attenuating and cicatrizing Collyriums. *P. AEginet. Lib.***6.** *Cap. 15. ,*

When there is a Coalition of the Eye-lids, either with one  
another, or with the Eye itself, whatever he the Cause, it is  
call'd an *Ancyloblepharon*; and is easily distinguish'd from that  
Distemper of the Eyes, when, by the Intervention of some  
glutinous Matter, as it often happens in the Small-pox, and an  
Ophthaimy, they cohere or are glued together for a Time only,  
without a true Coalition.

Sometimes the Eye-lids unite so closely, that, the Eye can  
' hy no means he open'd (fee *Tab.* 36. *Fig.* 23. A. A.) ; and  
*s* sometimes one, sometimes both Eyes labour under this Disor-  
der ; sometimes again the eye-lids cohere with the eye, either

by the White of the Eye, or the *Cornea Tunica,* in a closer or  
looser manner, according to the Number of Fibres hetween  
which there is a Coalition. Affections of this Kind usually hap-

pen whenever the Eyes, or Eye-lids, have been injur'd by the  
Small-pox, or some Violent Inflammation, or an Ambustion;  
especially with Gun-powder; or, in short, by any other Exul-  
ceration whatsoever. 'Tis also no unusual thing for Infants to  
he hern with this Defect, or for adult Persons to contract the  
same, as when, by .means os a preternatural Excrescence of  
Flesh in either Canthus, the Eye-lids grow together, of which . -  
I have seen an Example.

Tho’ this be, sor the most part, a dubious and dangerous  
Disease, yet it is never more so, than when there is a Cohesion  
of the Eye-lids with the *Cornea* ; for, in this Case, the Patient  
is seldom or never cur'd without the total Loss, or great Dimi-  
nution of Sight. But the Eye and Eye-lids are separated with  
the greatest Difficulty, when the Disease is caused by an Am-  
bustion; wherefore it is much the best way to be diligent in  
making Injections of moistening and mollifying Medicines into  
the Eyes, to preserve them always moist and moveable, and to  
prevent the inflamed Parts from being glued together. But  
when there happens a Coalition of the' Eye-lids from the Small-  
Pox, they usually also grow to the Eye, and especially to **the***Cornea,,* from which they cannot easily be separated without  
Very great Damage to the Eye; for, however Circumspectly and  
nicely they are divided, there will always remain some Spots and  
Cicatrices in the *Cornea Tunica,* which are a great impediment  
to Vision, and are seldom or never removed.

- From the Premifes we may infer, that the principal part of  
the Cure consists in separating, by the Help of a ready and ex-  
pert Hand, the conglutinated Parts. For this Purpose let the  
Patient be placed in Bed, or in a Chain, in such a Position aS  
may be most convenient for taking a full View of the Eye, and  
for **the** commodious Access os the Surgeon. This done, **the** i  
Surgeon is, first of all, to examine whether the Eye-lids be quite  
closed up, or whether there be any sinall Interstice to be met  
with any-where hetween them ; which, is there he any, is com..  
monly found in the great Canthus, or Corner of the Eye nearest  
to the Nose. If there he a perfect Coalition of the Eye-lids, a  
small Perforation is to he made in either Canthus, aS fliall be .  
most convenient ; in performing which, the Hand is to be con-  
ducted with the greatest Care .and Nicety, for fear of hurting  
the Eye, and especially the *Cornea.* Into this Perforation is  
to he introduced one Arm of a finePair of Sciffars, or a crooked  
small Knife, arm'd with a Button at Top, by the nice and even  
Management of which the Eye-lids are to be separated from  
each other. If the Eye-lids are not perfectly united, there is  
no Necessity of making a new Perforation ; but the Instruments  
besore-mention'd are immediately to the introduced, and the  
Eye-lids disunited in. manner aforesaid. But. if the Surgeon  
should not happen to be furnish'd with this Instrument, or  
Knife arm'd with a Button, to prevent, however, the Eye from ..  
being touch'd or injur’d by theSciflars, or sharp Lancet, it will  
be proper first to introduce a fine Probe with a Groove (see  
*Tab.* 36. *Fig.* 24.) ; and then, by another fine Instrument, as  
a Pain of Sciflars, or Lancet ufed for incision or Bleeding, with  
all imaginable Care to disjoin the Eye-lids from one another.

This done, we are to inspect Very narrowly; and examine  
with the Probe, whether the Eye-lids adhere to the Eye: If  
this he the Case, we are to proceed with severing them, by cut-  
ting with the greatest Caution ; or, if they stick to the Pupil by  
only a few.Fibres, the Separation is to be effected by a Knife  
arm’d with a Button, or a Lancet blunt at the Point. Is there he  
a perfect Coalition of the Eye-lids with the Eye, or at least with  
a great Part of is, this Operation by’Section is usually not only  
troublesome, but extremely dangerous ; for the Eye-lids can  
hardly be loosen'd from the *Cornea,* without damaging both lt  
and the Sight, as before observed:. But if the Coalitinn is only  
between the Eye-lids and the White of the Eye; their Division  
is much easier, to he accomplish'd, without Danger of Blind- -  
ness ; for a Hurt done to the White of the Eye is of so small  
Moment, that I dare maintain, that if an Abscission from one  
or other. of the Parts be unavoidable, it is hetter to cut off  
something from that white Tunic, than from the inner Mem-  
brane of tile Eye-lids; because by injuring this Membrane, the  
Ducts of the Lacbrymal Glands are at the same time. Very liable

Io he destroy'd, which would he of Very bad Consequence.  
Hence appears the Necessity of a skilful and weil-exercis'd, aS .  
well as steady. Hand in tins Operation, that the eye may re-  
ceive no Damage.. . .

But in order to prevent the separated Eye-lids from a fresh #Cohesion, which usually happens, if not prevented by Art, there -  
- is no hetter way than to interpose between them a very thin Slip  
of the finest Leather, a Bit of Linen, or Gold-beater'S Leal,  
or Wax, or a thin Plate of Lead, in the Form of a Half-moon,  
. or of an artificial Eye, and anointed with Oil of Almonds, or  
some such Oil; or else put some Lint between them. And  
- whatever is thus interposed, must there remain for some Days,  
er till the Danger of a new Coalition is over ., or if any thing  
happens to fall off, or is voluntarily taken off for some particu-  
lar Reason, it mint immediately be replaced. Is any Person,  
as is sometimes the Case, cannot bear to heve any thing of this  
Nature interposed, then, in order to prevent, as much as possi-

ble, a' new Coalition, a Collyrium, compounded of Plantain-  
water, Tutty, and Sugar of Lead, is *to be* often instill’d into  
the Eye; or a Powder prepar'd of Sugar, Pearls, and Crabs-  
eyes, from time to time sprinkled on the Place. The Patients  
also are to he charg'd gently to rub and stroke their Eye-lias,  
and to lift them up with their Hands. In short, the Surgeon  
himself must, now-and-then, introduce a blunt Prohe hetween  
the Eye and its Lids, for the more easy Prevention of a new  
Agglutination. : -

When by means of the Small-pox, or an Inflammation os **the**Eyes, as it often happens, the Eye-lids suck together during  
Sleep, thro' the intervention os some viscid Humours, or glu,  
tinous Matter, fts that the Eye cannot be opened, nor. the Pae  
tient have the Use os Sight ; in this Cose, the Eyes are never to  
he open'd by Force, but the Humours are rather to be molli-  
Iy'd by Injection *Dr* Instillation, or frequent washing the Parts with  
warm Milk, by the Use os which the Patients are usually enabled,  
in a short time, to open their Eyes, and to see again. *Heister.;*

ANCYLOGLOSSUM, a Contraction os the Ligaments os  
the Tongue, hindering Speech. From άγκήλος, crooked, and  
γλῶσσα, the Tongue. - ...

Some are Ancyioglossi [Crooked-tongued] from the Birth,  
others from a Disease. The former are fuch aS have the lower  
Membrane, which support the Tongue, form'd imperfect, or of  
too hard a Substance, by Nature ; the latter are those who are  
affected with an Incurvation of the Tongue, occasion'd by a pre-  
ceding Ulcer, and a hard Cicatrix left under- the Tongue; these  
speak with Difficulty, on which account they are cafl'd by the  
*. Greeks VMptXdDiot.* The AncylOglossi by Nature are late hefore  
they come to their Speech ; but after they heve begun to speak,  
they utter their Words without Impediment, and last enough,  
yet hesitate in pronouncing Words which are difficult of Pro-  
nunciation in other respects, as are those winch have R, L, or  
K, repeated once or ostener. Ancyloglossi ought to be cured  
only by manual Operation, under the Hands of a Surgeon,

To perform this-in a convenient Manner, the Patient must  
seat himself, and raise inis Tongue to the Palate; then, if the  
Cause of the Incurvation lies in the Membranes themselves, the  
Surgeon takes hold of them with his Hook,, extends them, and  
cuts them off, taking care that he does not, at the same time,  
cut the subjacent Veins. But if a Cicatrix be the Cause of the  
Curvature, it is in like manner taken up with the Hook, ex-  
tended, and whatever is hard, and not of a Piece with the  
natural Flesh, is cut off. After the Operation the Mouth is to  
he wash'd with cold Water, or Posca, and then the Wound .is  
to he sprinkled with Powder of Frankincense, and Lint must he  
apply'd to the Place, r On the Days following the Sore is to he  
wash'd with Hydromel, and anointed with *Egyptian* Oint-  
ment, and Lint is to he laid thereon, in order to keep the Sides  
of the Wound separate, that the fame may not he form'd again.  
*Aetius, T.etr.* 2. *Serm.An Cap.* 36. *Paulus AEgineta, Lib.As.*Capisusa. ‘ ‘ ‘ \*

That Operation by which the Membrane under the Tongue,  
commonly call'd the Frenidumthy Physicians, is divided or cut,  
is styled *untying the Tongue.* This Operation is most generally  
perform'd upon Insants, and that with two different Intentions:  
..First, in Very tender Infants, when the fore Part of their  
Tongues, from the Moment of their Birth, .is so closely join’d  
to the subjacent Parts, by means os this Membrane, that they  
cannot move their Tongues sufficiently, or thrust them so far  
out of their Mouths as to be able to suck. This Operation is  
also perform'd on Children somewhat, farther advanced, when,  
by tins Membrane's being toossreight or short, they cannot pro-  
nounce articulately at an Age when it might he expected of  
them. For both these Reasons, this-Operation is absolutely  
necessary ; but it must be remember'd, that it is not to he. per-  
form'd promiscuously, and at random, upon all new-born Chil-  
dren, as most Midwives, Women, and even some Men, idly  
imagine. We have Reason, rather to assert, that it is scarce ne-  
cessary in one of a thousand Insants;' for experience has shew'd  
- both-myself and a great many more .skilful Physicians, that this  
Case occurs sar less frequently than Hare-lips ; sor when a Child  
can thrust its Tongue without its Lips, there is nothing amiss  
shout the Frenulum ; and it will learn, in Process os Time,  
both to suck and speak, unless- there he some other Defect in  
the Organs necessary sor these Purposes., On the other hand,  
is the Infant can scarce move its Tongue, and cannot thrust it  
heyond its Teeth ., *or if,* in some other respect, this Manbrane  
should fetter the Tongue, than a Ikilful Incision hecomes very  
proper: But because this Operation is not to he rashly per-  
form'd, lest, aS has frequently been the Case, the most terrible  
Evils, and sometimes Death itself, should ensue, it will not he  
amiss to direct to the safest and most accurate Method -of.-per-  
forming it. . .. \* .... T . :

The Point of file Tongue, **then,** ought to be **a** little **ele-**vated with the Lest Hand, using either a Linen Cloth, that  
it may not flip thro' the Fingers, (see *Tap.* 42. *Fig.* I.) or **even**with a small Fork made sor that Purpose *(sea Tab.* 42. *Fig.* 2.  
3. and *Tab.* 22. *O. and P.)*; then as much of the Frenulum, as  
is Ireceflaiy for Speech and Sucking, is to he cut with blunt-

pointed Scissius, (see *Tab.* 22. C.) or an Incision-knife, hetwikt  
the *Fence Ranince* and the lower Salivary Ducts : But this is to  
he .done with a great deal of Cantion, lest either the Salivary  
Ducts, the *Venae Panina,* or the Nerves os the Tongue, should  
happen to be cut at the same time ; for when these are injur'd,  
very terrible Consequences ensue. Thus *Dionis,* in his Surgery;  
makes mention os an infant, who by an excessive Hoemorrhage,  
in consequence of the *Vina Ranir.a* being cut, died very soon  
after the Operation. But if a Vein should he unluckily Cut,  
whichmay Very readily happen in a Frenulum that is too thick  
and short; a Compress, soak’d in Vinegar, is to be held a little  
while under thoTongue, till the Blood stops ; \* bur if, at the first  
Incision, the Tongue ismot sufficiently untied, a sew Days, or  
even a sew Weeks aster, as Circumstances shall require, the  
remaining Part of tho Frenulum is Very cautioufly to be cut with  
Sciffars, or an Incision-knife: Then, after the Operation is  
. over, the Finger dipp'd in Honey.Of Roses, or Syrup of Violets,  
is Very frequentiy to he rubb'd up and down under the Tongue,  
and the Wound is to he anointed with.it, lest the cut Frenulum  
should again unite. . . \_

From what has heen said it appears, that Disorders of this  
Nature are not only less frequent, but of more difficult and  
hazardous Cure, .than is generally thought. Upon this Account,  
those Midwives.are miserably mistaken, who, concluding with  
the ignorant Multitude, that no Infant, is hern without this De-  
fect, thrust their wholeTingere into, the Infant's Mouth, and  
with their Nalls destroy the Frenulum ; for it must necessarily  
happen, that, such a rash and fool-hardy Laceration, hy their  
Naiis, must bring an Inflammation of that Membrane, Convul-  
sions, and often the Death of the littie Patient : For this Rea-  
son, Midwives and foolish Women are not only to be caution'd  
against such Practices, but *Hildanus* is to be carefully consulted ;  
for he (in *Cent.* 3. *Olis.* 28.) hath Very accurately laid down  
not only the Nature and Cure of the Disorder itself, but also  
the several bad Consequences that possibly may, and generally  
do, ensue from performing this Operation at an unseasonable  
Time, or in an uncautious Manner. But when the cutting this  
Frenulurn is absolutely necessary, at may be done much more  
safely, and with much less Pain to the Patient, by the Sciffars  
reserr'd to, than by the long Nails of a simple old Woman.  
*Horsier.*

There is no Operation belonging to a Surgeon, which is com-'  
manly esteem'd of so flight Moment as cutting the Ligament  
under the Tongue, the Care of which is commonly committed  
to Midwives, who use to break it. off with thair Fingers. Now  
this. I cannot but disapprove, hecause they Very often lacerate  
and break the adjacent Parts, so as to occasion a Pain and In-  
flammation, which hinder the Child from Sucking;. whence he  
grows froward, lean, and weak. We ought therefore Io act  
with Prudencein this Operation, and not think too (lightly of  
it, tho' it seems to be tire least in which we are concern'd : -In  
the first Place, we ought to examine, whether the Ancyloglos-  
sus really wants the Operation ; for Children are often incapa-  
ble of uttering an articulate Voice, from some other Cause than  
the. Ligament under the Tongue, being not really Tongue-  
tied ;. and in such Subjects a Section would he dangerous, as will  
appear from the following Example: . ..

A Peasant of my Neighbourhood, in the Village of *Cor sellis,*named *Petit Yeux, in May* I6c8. brought his Son, two Years  
old, to my House, to have his Tongue unty'd; for the Parents  
. were throughly persuaded, that if the Ligament was cut, the  
Tongue would perform its Office, and the Child would - speak  
in a short time’ But when the Mouth was open'd, and the  
Tongue, winch was Very thick, was raised, no nervous Liga-  
ment appear'd; therefore I sent back the Parent with, the Child,  
without doing any thing. . A Month after came-about a Cir-  
cumforaneous Empiric,, or Mountebank, who . had the Child  
brought to him: He persuaded his Parents, thet his Tongue was  
ty'd by a Very hard nervous Ligament; and had .the Impudence  
to affirm, that for a Sum of ready Money he could easily bring  
the Child: to-speak in a short time.' He receives the Money,  
the Child is placed in a Woman's Lap, and the Impostor goes  
to work ; in which, as I was told by some who stood by, the  
separated the Tongue both before ana on both Sides to a great  
Depth from its Basis. The Consequence was, that the Boy,  
who before could go upright, on that Very Moment sending  
forth a most loud and- bitter Cry,. was sein'd with a Convulsion,  
so that his Knees were drawn up towards his Groin, and his  
Arms towards his Breast. . On *July* I8. next, I visited this  
Child, and found that he could not speak a Word, and that his  
Legs and Arms were.still Contracted, and, when extended by  
Force, still sell back into their former Posture ; his Tongue was'  
thick, and his Head, and all Parts of .his Body, of a phlegmatic  
Constitution. ' . ’ -’. - ’

I had a Brother; by .the Mother’s Side, who was Very sickly  
when a Child, and, amongst other Disorders, could not speak: a  
Word-fill he was three Years old. AS I lived with a Surgeon,  
and exercised the Operation of cutting this Ligament almost  
every Day, I had once a Fancy, when I Visited my Father's  
House, to inspect my-Brother’s Tongue. L found it. tied and

bridled with a gross, thick Ligament in such a manner, that he  
could hardly put it out to his Fore-teeth: I cut it aS well aS I  
could, and for some Days after anointed the Place three or four  
times a Day with Honey of Roses. Two Months after the Ah-  
scission I found the Ligament in some measure renew'd, so that  
**I** was oblig'd to use the same Means aS before; which, by **the.**Divine Blessing, happily succeeded ; for the Boy began to speak  
in a short time, and has ever since continued to speak as well  
and articulately as any Man.

This Operation is Void of all Danger, if it he rightly per-  
form'd. We are principally to take care, that we do not cut too  
deep : My way is to raise the Tongue, and cut the Ligament  
commonly in two, and sometimes in three Places; by which,  
means it is more difficult for it to grow together again, than if  
the Incision had been only made in one Place. I cut only what  
is nervous, scarce touching the Flesh; and if it be not cut  
enough the first Time; or if it grows together again, the same  
Operation may be renew'd. When the Ligament is cut, I or-  
der the Nurse to raise the Tongue very often, and gently, with  
her Finger anointed with Honey of Roses, or common Honey,  
which is the way to prevent an Agglutination. *Hildanus, Cent.*3’ Obsqu\*- . f ...

ANCYLOMELE, 'Αγκυλομιτλη, from άγκύλος, 'crooked,  
arid μήλη, a Prohe. A Surgeon's crooked Probe ; or, a Probe  
with a Hook. \* ’

‘ ANCYLOSIS. The same aS ANCYLE, which see.

ANCYLOTOMUS, ANCYLOTOMUM, . Ἀγκυλοτό-  
μος, Ἀγκυλοτόμον, ’from αγκύλος, crooked, and τἐμνω, to  
cut. A crooked Knife to cut the Ligament of the Tongued  
It is also used, aS by *Pi AEginetaq* to signify any crooked Krtife  
in general, si

ANCYRA, 'Αγκύρα, an Anchor, a Hook. See UNCUS.

ANCYROIDES. PROCESSUS, a Process from the upper  
Part of the Neck of the Scapula, t or Sheulder-blade, resembling -  
an Anchor, whence it takes its Name. It is also called *Cora-  
coides,* and *Sigmoides,* from representing, in some measure, a  
Crow'S Bill, and the Letter Sigma. ' *Rusius Ephesius.*

ANCYROMELE, the same as ANCYLOMELE. *Galen*explains it ἄγκιστρον, a Surgeon's Hook.

ANDA, *G. Pison.* Is a Tree of *Erased,* the Wood of  
which is spongy and light 5 the Leaf longish, fibrous, and  
pointed ; the Flower large and yellow, and the Fruit a grey  
Nut, which incloses, under a double Rind, two Kernels, os  
the Taste of Chestnuts. "

The Fruit is said to he Purgative, and a littie Emetic: **Two  
or** three of the It erneis are a Dose. They extract Oil by Ex-  
pression from these Kernels, ’ with which they anoint Their  
Limbs,

The Rinds of the Fnsit are esteemed proper to stop a Loose-  
ness. Tbrown into Ponds, they kill\* the Pish. *Lemcry de  
Drogues. -- - ' - . - ..*- ' ANDARAC,-red Orpiment. *Rul. Joohns.*

ANDAS, a Solution of Salt,- or Salt resolved. ' *Pdra'celsusse*ANDENA, Steel imported from the Eastern Countries,  
which melts’in the Fire, and takes any Forth. ' *Kul. Juhns.*

ANDIRA, or, ANGELYN, *Cos Pison. AnTtco in Brasil,*the Wood of which.is hard; and proper for Building: Its Bark  
is of an ash Colour : Its Leaves resemble those of the Laurel,  
hut are less : It produces blackish Buds, from whence proceed  
many Tufts of Flowers, which are fragrant, and os a fine pur-  
plish and blue Colour : Its Fruit is of the Shape and Size os ch  
Egg, green at first, hut grows blacker by Degrees '; has, as  
it were, a Seam running down one of its Sides, and is of a  
Very bitter Taste. It is cover'd with a hard Rind, inclosing a  
**Grain,** or yellowish Kernel, of a bitterish, and somewhat  
ashingent Taste.

They pulverize this Nut, and give it for the Worms ; but  
the Quantity must not be above one Scruple for more than  
this, they say, turns to Poison.

The Bark, Wood, and Fruit of this Tree are as bitter as  
Aloes, in which It differs from another ANU IRA, winch re-  
sembles it in every thing, except the Taste, which is insipid.  
The wild Beasts eat of this Fruit, and it fattens them. ’ *Lemcry  
de Drogues. ' , '*

ANDiRA, is also an Animal Call'd *Andira guaeu* ; a kind of  
Bat in *Brasil,* the largest of .which are as big as our Pigeons’:  
They call them Horned Bats, because of a fort of Excrescence or  
pliant Body above their Beak : Their Wings are longer than  
half a Foot ; they are of an ash Colour, have large Ears, and  
white Teeth ; each Foot hath five Toes armed with sharp  
Claws. They persecute all Sorts os Animals, and suck their  
Blond. Some of these are Very dangerous ; for they get into  
Beds in the Night, and so subtilly open the Veins in the Feet  
os those who are in Bed, that they are no sooner perceived than  
by the Bleed that flows in the Bed, which it is a difficult Mat-  
ter to stop. The Inhabitants of that Country reckon the  
Tongue and Heart *os* that Animal amongst Poisoris. *Lemery  
des Drogues.*

ANDRACHNE. Among the homonymous Words of the  
*Materia Medica,'* which are very numerous, is*'hefastTPs,* An-

drachne, which signifies a Tree like .the Strawherry-tree, and  
also the Herb *Portulaca,* Purflaim In vain does *Pliny* distinguish  
here hetween the Heth and the. Tree, by changing one Letter ;  
as if the Tree were called Άνδραίχλη, *Andracstle [Pliny, Edit.  
Santandreau,* I5S2, *distinguishes the Tree by leaving out a Lets,  
torso that, is, the sirfi n, calling it* AdrachneJ ; for this *Attin*Name belongs.as well to the Herb aS the Tree, the *Artics* ufu-:ally saying *Andrachle,* instead of *Andrachne,* which is the comed  
inon Word ; justas they sayxiT^’, Litton, for what -others-  
call νίτρον. No less. mistaken is *Galen,* when he labours at.  
making- a nominal Distinction os Ἀφρίνιτρον, and ΆφπόλΓΓραΓ,'-  
Aphronitron, and Aphrolitrom. \_ .... : .

" Andrachne, is theHerb in Latin *CeffiPbPortulaca, CTPorcacla,  
quasi a Forces, "* aS taking its Name from Swine ; and hence?  
Ci the later *Greeks* heve call’d it χοιραβότανον. Hogwort, "  
We [the *French'}* commonly call it *Pourpier,* when we should  
say *Pou spied, quasi Pulli Pes,* FowpsFoot; for so it was call’d  
by the *Latins* of the latest Ages.. The spurious *Macp.r de  
Herbis, "*

\_ Andrachrte *Graecis, quae* Portulaca. *Latinis  
Dicitur, haec vulgi* Pes Pulli *more vocatur. . .: :*

- Many: other Herbs have Names of the. like Kind imposed  
upon them ; as *Pes Alaudae, 'Pes Corvinus, Pes Columbinus i*Lark’s-soot, Crow-foot, Dovess-foot, *etc. Salmas. deHomanyrti  
Hyl. Jatr. Cap. i.* See PoRTULAcA.

- ANDRANATOME, or, ANDROTOME, Ἀνδρανατομῆ,  
or Ἀνδροτομἤ, from ἀνὴρ, a Man, and τεμνω, to cur. The  
Dissection of a human Body, especially of a Male.*. Castellus .*from *Marc. Aurel. Sevcrini Zootome Demo crip.*

ANDRAPHAXIS, os, ANDRAPHAX, Ἀνδράφαξος,Ἀμά  
δραφὰξ, in *Hippocr,* περἰ γυναικ. signify the same aa Atriplex.  
Ἀτραίφαξις, stinking Arrach. *Fars. Oecort. Hippoc. -*' ANDRAPODOCAPELOI, -Ανδραποδοκαπηλοι, from ἀμό  
δμάποδον, a Slave, and κάπηλος, a Dealer ; and 'Ανδρακάπηλοι;  
These were a certain Species of Brokers, mentioned in many  
Passages of *Galen.* Those People were in antient Times so call'd;  
whokeptBoys, Girls, Slaves, Eunuchs, and other Men for Sale;  
not for the Purposes of Lust, as Pimps did,-but on other Accounts.  
These People, that they might render their Commodities the more  
saleable, apply’d themselves- carefully to beautify the Bedies of  
those they were to dispose of: Hence we read in *Galen,* that they .  
us'd to wash the Faces of their BoySwith strain'd Ptisan, Bean-  
meal, and sometimes with Nitre, in order-to render their Coun-  
tenances inore beautiful and sparkling ; -that they sometimes  
lashed the Hips of those which were emaciated, with Rods,  
and anointed them, that their Bodies might appear fuller and  
better shap'd ; that they brac'd up the Rihs of their Giris with  
strong Rollers, that their Breasts might appear full, and that  
the Breadth and. Fulness of their Haunches, commonly esteemed  
an Ornament to a Woman, might he set off to the greater  
Advantage; and that they sometimes pull’doss, in different  
Ways, the Hairs growing on their Cheeks, and other Parts, of  
their Bodies, that they might appear more beautiful and young.  
The *Roman* EdileS enacted a Law, that they should affix cer-  
tain Tities to their Slaves design'd for'Sale, expressive of the  
Diseases they labour'd under, or the Vices they were addicted  
to that the Faulty, in any of these respects, might he re-  
turn'd to their poper *Andropodocapelos.* - ὶ

ANDREAS, an antient Physician, mention'd by *Celsus in*the Preface to his fifth Book. This Gentieman, with *Zena,*and *Apollonius,* fumamed *Mys,* left behind them whole Vo-  
lumes on the Virtues of purging Medicines.. Great Part of  
these Remedies were neglected, and brought into Disuse, by  
*Asclepiades,* and not without Reason, as *Celsius* sstys ; for since  
almost all Cathartics are of bad Juice, and hurtful to the Sto-  
mach, this Physician turn'd all his Studies to that Part of Me-  
dicine which cures by Regimen. .... . . i

**ANDRE***JZ* **COLLYRIUM,** *the* Collyrium *of* Andreas, *With*

*Which the Forehead is fa.be anointed in cm inflammation of the  
Eyes, is thus prepared si . si*

Take Gum Arabic, one Dram two Grains and a half; Cc-  
rnss, ’Antimony, each two Drams five Grains ; Litharge  
boil'd and wash'd,' four Drams ten Grains. The Litharge ,  
- must be boil'd in Rain-water, and the dry Ingredients  
bruised with the Juice, of Myrtle. *Celsus, Lib. 6. Cast.* 6.

**ANDREAE MALAGMA,** *the Malagma of* **.ANDhEAs, flap***s \ sidens in the Side.'*

Take of Wax, one Ounce three Drams twenty-seven  
.Grains ; Mifleto; Tears *of* the .-Sycamore-tree, -each

- one Dram two Grains and an half; Pepper round and  
Tong, Gtun Ammonias, Bdellium, Illyrian Orris, Car-  
damoms, Amomums'Xylobalsamum, Male Frankincense,  
Myrrh, dry Rosin,'each one Ounoe two Drams twon-  
ty-five Grains ; Pellitory of‘ *Spain, Gnidian* Grains,  
Aphronitrum, Sal Aminoniac, *Cretan* Birthwort,'Root  
of wild’ Cucumber, Resin of liquid Turpentine, each  
two Ounces four Drams "fifty Grains:'To these must  
*\* ; -he*

he added *ss* much Unguentum Irinum , aS will save to  
mollify and make them of a proper Consistence.

This Medicine resolves, draws out a Humour, ripens Pus,  
breaks the Skin, and cicatrizes. It is proper to be apply’d to  
stnall and great Abscesses, and to the Joints, and is therefore  
gced for the Gout and Solatia. It is good for an inward  
Bruise, and mollifies Hardnesses and Inflections in the Region  
of the Stomach, extracts Bones, and, in short, is good in  
**all** Cases where Heat can he of Service. *Celsos, Lib.* 5.  
*Cap.* IS.

ANDRIA, Ἀνδρεία, from ἀνὴρ,- a Man. An Hermaphro-  
= ditical Woman, who has the Parts of both Sexes.

- ANDRIUS, 'Ανδροῦος, manly, metaphorically applyid to  
strong generous Wine. ’Ανδροῦος ίινος in *Hippocrates,* accor-  
ding to *Erotian,* either signifies generous Wins, or Wine from  
the Island of *Andras. . , . -*

ANDROGENIA, Άνδρογένεία, from ἀνὴρ, a Man, and  
*yvndu,* to generate. This Word in *Hippocrates,* according to  
*Golem’s* Exposition, signifies a Succession of Males, or a Propa-  
gation of the Male Sex.

; .ANDROGYNI, Ἀνδρογένοι, from ἀνὴρ, a Man, and γυεὴ,  
**a** Woman. Effeminate Men, in Opposition to Andrii, άνδροῦοι,  
manly. *Hippoc. oruri stair. Lib.* I. The Word is also used  
to signify Hermaphrodites. \*

ANDROMACHUS. *Andromachus* the Elder was a Na-  
tive of *Crete,* and lived under the Reign of *Nara,* as we may  
conclude from his Poem upon the *Theriaca,* dedicated to that  
Emperor. *Galen* also observes, that *Andromachus* liv’d after  
*Menecrates,* who liv’d under *Tiberius* and *Claudius,* and before  
*Crito,* who flourish’d under *Trajan. "Wit* know nothing con-  
cerning this Physician’s Sentiments, or the Method of his pro-  
ceeding in the Cure of Diseases : The only Remains we have  
of his are a great many Descriptions of compound Medicines,  
which were partly of his own Invention. *Galen,* who took  
the Pains to transmit these Deseriptions to Posterity, places  
*Andromachus* among thcfe Authors who have wrote best upon  
Medicines ; but blames him for baaing given the Descriptions  
. of them, without specifying their Properties and Virtues ;  
and without having pointed out, except very rarely, thofe  
Diseases they were calculated to fubdue or remove. The most  
famous of all the Compositions, either invented or described  
by this Physician, is the *Antidote* which he distinguished by **the**Epithet, γαληνη, that is. *Calm ;* or, rather, according to **the  
Idiptn** Of our Language, *Calm-pricuring ;* hut this Medicine  
- -came afterwards to be called *Theriaca. Andromachus* wrote a  
*Greek* Poem in Elegiac Verse, which he dedicated to *Flerg,*and which is extant to this very Day. In this Work he teaches  
the Manner of preparing his Antidote ; and specifies the parti-  
cular Disorder for which it is proper. He chore to give this  
-Description in Verse, rather than in Prose, that Alterations  
might not he easily made in it without being discover’d, At  
least *Galen* is of this Opinion, and approves of the ConduA of

*. Andromachus* in this Particular.

Till that Taint the Antidote of *Mithridates* was the only  
Medicine Used by every body ; but when that of *Andremachus*. came to he known, the former was laid aside as useless, tho’,  
to speak the Truth, the latter was no more than an Imitation  
of it ; since the only essential Difference between them con-  
fisted almost in nothing else than the Addition os the Vipers as  
an Ingredient into the *Theriaca.* Notwithstanding this, the  
Antidote of *Andromachus* was so highly esteemed at *Rome,*- that some Emperors would have it made up in their own Pa-  
laces ; and took particular Care to have all the ingredients  
. brought from the Places where they were produced, on purpose.  
.The Emperor *Antoninus* ufed the Bulk of a Bean of it every  
Morning sassing, and its Reputation was now so effectirally  
.established, that several Physicians endeavour'd, but in vain, to  
alter it, and compose new *Theriacas* in their own Manner:  
But the *Theriaca of Andromachas* retained its Charactsr in spite  
of all the Efforts they could make ; and what is still more tut-  
. prising is, that tho\* a great many Faults or Superfluines have  
- long ago heen observ’d in its Composition, yet, to this *very*

Day, the most considerable Towns in *Europe* religioufly fol-  
; low the Directions of *Andromachus,* in their Methnd of pre-  
paring it.

This Direction comprchends above sixty ingredients, most  
Part of which are Aromatics, except some common Simples,  
Gums, and inspiflated Juices, the molt considerable of which  
is Opium. But the Vipers are the Ingredients from which this  
Medicine receiv’d the Name *Theriaca*; for the Word Θηείον,  
among the *Greeks,* ainported mi Kinds of fierce Animals, hut  
more particularly such as were esteemed venomous. Before  
the *Vipers* were ufed as an Ingredient in the *Theriaca,* they  
were thus prepared : After their Heads and Tails were cut off,  
they were fknin’d, their Entrails taken out, and these Flesh  
separated from their Bones : Then the Flesh was wash’d, hell’d  
in VVater with Dill and Salt, and lrnewest with Crumbs of  
Bread into fucb a Consistence, as that the Whole micht be  
. ierm’d into Troches, or tittle Cakes.

If **the** Antidote of *Andremachus* was posiest of the wonderful  
Opalines ascribed to it by its Inventor, we should scarcely heve  
Occasion for any other Remedy ; for he prescribes it against  
Poisons and Venoms of all Kinds, and pronounces it a Remedy  
sor Pains and Weakness of the Stomach ; for Asthmas, and '  
Difficulty of Breathing; for- beginning Consumptions, Empy-  
emas, Colics, Jaundice, Dropsies, Weakness of Sight, Con-  
vulfioris. Ulcers of the Bladder, Venereal Impotence, Pains of  
the Kidneys, and even of the Plague itself.

*Andromachus* the Son, who reduced the Father’s Verse to  
Prose, asserts, in so many Words, that the *Antideie* called  
*Theriaca* was excellent in all indispositions of Body, proceeds  
ing from internal Causes,- and especially for Disorders of the  
Stomach, for Poisons, and for intermitting Fevers.

Both Father and Son talk’d of their Antidote in this ro-  
mantic Strain. But before we go farther, we must make **a**particular inquiry into the Tirrie when, and the Manner bow,  
these Compositions came to he used,- and whet it was that  
People meant by an *Antidote. Hippocratis',* and the most an-  
tient Physicians, seem to heve founded the principal Maxims of  
their Practice upon the Observation of the several Motions of  
Nature in particular Distempers ; and almost the Whole of  
their Method of Cure consisted in Diet, that is, in giving pro-  
per Rules relating to the Regimen of the Patients. *Herpphilui*and his Followers were the fust who made any considerable  
Use of Medicines, or who began to repose a greater Confidence  
in their Efficacy, than the Physicians who went before them.  
*Hippocrates,* it must he owned, made ufeos them sometimes, but  
very rarely, and even those he prescribed were of the most simple  
Kind. This Practice was not imitated by the Ahettors of *Hie.  
rophilus,* nor even by some Physicians, who liv’d a little before  
his Time; witness the Complaint which *Erastflratus* his Co-  
temporary made against those who compos’d *Ratal Compofstions  
and Antidotes,* which they styled the *Hiande of the Gods, in*these there were Ingredients drawn from Plants, from Ani-  
mals and Minerals ; from the Earth, and from the Sea.

But, compound as these Antidotes were, of which *Erascstrd.  
tus* complains, ’tis probable that they were not so faulty, in  
that respecti as those which were afterwards made ; and that *r*hefore the Antidote ascribed to *Mithridates,* the shortest Re-  
ceipt of which contains thirty-six Ingredients, so compound  
Preparations hed not heen seen. There was also another An-  
tidote much more simple, the Receipt of which was found in .  
the Closet of *Mithridates,* after be was routed by *Pompey.*We don’t know at what particular Time this fecond Receipt  
or Prescription was made public, but ’tis probable it was so,  
very foon aster the first, whether it actirally hed *Andromachus*sor its Author, or ouly usher’d itself into the World, under **the**Sanction of his Name. Be this as it will, *Celsus,* who pro-  
hably llv’d about an hundred Years after *Mithridates,* has de-  
scrib’d the *Mithridates-* upon the Model os which rhe *Theriaca,*and all the other Medicines , consisting of a great Numher of  
Ingredients, were made.

‘ It may he said, in Defence of these Compositions, that Ex-  
periments upon Simples being dally multiplied. Physicians ima-  
gined, that the more of these Simples of similar Qualities were  
trended into a Composition, the more likely it was to aofwer  
the End intended by it- It is also possible, that, as their  
Knowledge, both of the Qualities of Simples, and the Natures  
of Diseases, was very imperfects they might imagine, that by  
miking a great many Drugs together, they could produce  
Effects which one could not, since the Medicine is often wiser  
than the Physician who prescribes is. But *Pliny,* and a great  
many others after him, heve imagin’d, that they crouded such  
**a** Numher of Simples into their Compositions, ooly *ad Ostenta-  
tionem Areis,* rather to make People believe, that there was more  
of Art and Mystery in their Profession, than from a Persuasion  
that such a I arrago was of any real Use in the Cure of Di-  
seases.

The fame Author, reflecting upon' the *Mithridate* having  
fifty-four Simples in its Composition, and upon the stnall  
Quantity of each Ingredient chat must consequently he taken  
at a Dose, is fo provok’d against this Abuse, that he openly de.  
clares his Surprize, that Men should be capable of so glaring and  
bare-fiac’d a Piece of Imposture. He puts the Theriaca upon  
**the** fame footing, and fays, that the Theriaca was invented  
for the sake of Delicacy or Seofuality ; that it is' composed of  
Ingredients produced m Foreign Countries; and that there  
were every-where Numbers of simple Medicines capable of an-  
fwering the fame Purposes equally well. Here he must cer-  
tainly mean the *Theriaca* of *Andromachus .,* for whet' he says  
with regard to **the** Foreign Ingredients, cannot he apply’d to  
that other Sort of Theriaca, which he elsewhere delcribes,  
*[Lib.* 20. *Cap.* 24.] and which, he fays, consists only of a very  
small Number *os* common Simples. Hence we may infer,  
that the Antidote of *Andromachus,* which was called *Galene* by  
its Author,, had **the** Name of *Theriaca* given to it before **the**Days of *Crite,* as the Author of the Book *De Use Theriaca,*ascribed to *Galen,* insinuates. Now *Caito* liv’d under *Trajan,***Whereas** *Pliny* **liv’d under** *Nares* **and** *Vespastan,* and const-

qnently might have seen both the elder and younger *Plinys,*whose Cotemporary he was, tho' he mentions neither one nor  
the other. . .

: As for the Name *Antidote,* which was bestowed upon the  
*Theriaca,* it is composed of two *Greek* Words, one of which  
signifies *against,* and the other *given s,* because Antidotes were  
given agamst Poisons, Corruption of Humours, or other bad  
Dispositions of Body. This Word seems in the *Greek* Lan-  
guage to be both of the Masculine and Feminine, and even  
sometimes of the Neuter Gender ; and the *Latins* heve said,  
*hac Antidotus,* and *hoc Antidotum.* Bur, in all Probability, the  
*Greeks* at first used this Word as an Adjective, and not as a  
Substantive. When they used the Words ή they un-  
derstood the Substantive Δύναμις, which signifies every Sort of  
Medicine, Simple as well as Compound. The *Latins* might  
have tranflated the Word Δύναμις, by *Potentia* ; but the Idiom  
of their Language, and the particular Idea they had affix’d to  
that Word, would not admit of such a Tranflation. The  
*Latius* then, for want of a proper Word to express the *Greek  
Acvvatrti,* made use of the Words *Medicamentum* and *Composi-  
tio,* Δύναμις ἀντίδοτος. *Compositio contra data,* as if one should

\* say. Δύναμις τετραφάρμακος, a Composition, consisting of four  
Simple Ingredients ; Δύναμις ήπάτεκή, ἀρτεριακή, *a Composition  
for the Liucr,* or the *As.pcra Arteria.* The Word Δύναμις  
was not only suppress'd by the *Greeks,* when they talk'd of  
Antidotes, but. almost upon all other Occasions: Thus, for  
Instance, they used ή διὰ κωδεῖων, to express a Composition of  
Poppy-heads, and even without the Article, they used ἀρτηριοκή.  
Io denote a Medicine for the *As.pera .Artcria*; κωλικύ, fora  
Medicine against the Colic. We may even venture to fay,  
that the Conjunction of these two Words *Antidotus TranquiUa,*‘ or *Thcriaca,* imports, that the former is a Substantive, and the  
\* latter an Adjective; but we must observe, that the Adjective  
*tranquilla* is an Epithet given to this Composition, and that

- the Meaning is the same, aS if one should say. *Compositio Anti..  
datosYTranquilla dicta* ; so that these two last Words are equal-  
ly Adjectives. - The Case is the fame with regard to the Names  
os other particular Antidotes, such as *Hiera,* or *Sacred, Teleia,  
or Accomplissed,* &c. I may also shew, that the Word *Antido-  
tus* was-an Adjective, from the Use *Scribonius Largus* makes of  
it, who calls a Plainer, applied to Bites given by mad Dogs, *Em..  
Nostrum Antidotum.* I must also observe, that the *Greeks,'* in  
their Turn, had no Word that corresponded directly to the  
*Compositio* of the *Latins; for* Σύνταξις,'tis true, signifies *Com-  
position* ; but then it is restrained to the Act of Composing, and  
did not imply the Effect or Result of that Act, or the Thing  
composed, winch the *Latins,* and we ourselves, mean by the  
*Wex ά-Composition.* In *Artemidorus,* the Word Συνταγῆ occurs,  
which*-Cornarius* tranflates *Compositio* ; but I am inclined to  
think, that it ought rather to be tranflated by the Word *Prae-  
scriptum,* or the Receipt of a Physician.

- Having now hinted at the Name of this Medicine, the Na-  
ture and Number os itsTngredients, and the Properties ascribed  
to it by its Inventor, it now remains, that we should give  
fome Account Of the Method in which it was prepared, and  
the-Consistence if had; which was common to it, with all the  
other Antidotes.. - In order then to prepare the *Theriaca,* the  
Sprees, and other Ingredients capable os being reduced into a  
Powder, were pounded. The Gums and Juices were dissolved  
*in Cretan* or *Falernian* Wine, and passed through a Sierce after  
they were reduced into a Pulp.--Then all these were mixed  
*secundum Artem,* in three times the Quantity of clarified *Attic*Honey. I think it needless to enter upon a fuller Detail, or  
more particular Account; of this Medicino, because 'tis in our  
Day too well known to call for a more minute and particular  
Description. What has been said, of the Quantity of Honey  
used in this Composition, is sufficient to convince us, that it  
must have been of a pretty good Consistence. I (hall not here  
fpealt of the Various Antidotes which different Physicians in-  
vented in Imitation of the *Thcriaca,* and the *Methridate,* nei-  
ther shall T consider those that were in Uso before only; thus  
much I must observe in general, that- they wore all- nearly of  
the same Consistence, fince thby were all made up of various  
Powders, Gums, Juices; and Honey. - *Le Clere. Hast, de ea  
Medicine.*

Toryhis Account, of the Origine *of* the *Thcriaca,* I (hall  
subjoin the Method of making it, as directed by the College,  
with *Llluincsis* Remarks. ; \*\* .

ANDROMACHr THERIACA.- TheTfeacle of *Andromaches,*Commonly called- *Fenice Treacle. . .* - ς -

Take of the Troches of Squilis, forty-eight Drams; of the  
Troches os Vipers, Long-pepper, Opium, and Troches  
Of Hedychroi, each four-and-twenty Drams ; of exungu-

\* ” stated dry red Roses,- of fragrant *Sclavonian* Orris, of Juice  
os Liquorice, of Sweet NaVew-seeds, of Tops-of. Scor-  
dium, of Opobalsamum, Cinnamon, and the Troches of

.: Agaric, each twelve Drams; of Myrrh, Sweet Costris,  
or Zedoary, Saffron, true Cassia Bark. Soikenard. Schoe-

nsnth, white and black Pepper, Male Frankincense; *Crar  
tan* Dittany, Rhapontic, *Arabian* Stoechas, Horehound;  
*Macedonian* Parfley-seedS, Calaminth, *Cyprus* Turpentine,  
Roots of Cinquefoil, and Ginger, each six Drains; of  
.the Tops of *Critic* Polymountain, of Ground-pine, *Col..*

*tic* Spikenard-roots, Amomums, Styrax, Meum-root, .  
Tops of Germander, *Pontic* Phu-root, *Lemnian* Earth,  
*Indicn* Leaf, calcined *Roman* Vitriol, Gentian-root, Gum  
'Arabic, Juice of Hypocystis, Carpobalfam, or in its De-  
fect, Nutmegs or Cubebs, of Seeds of Anise, Cardamoms,  
Fehil, and Heartwort, of *Acacia,* or in its stead, the inspii-  
sated Juice of sour Plurns, of the Seeds of Treacle-  
ihustard. Tops of St. John’s-wdrt, Seeds of Bishops-  
weed, and Sagapenum, each four Drains; of the best  
Castor, long Birthwort-root, Bitumen Judaicum, or  
Amber, *Cretic* DaucuS-seed, Opopanax, the Lesser Cen-  
taury, and sat Galbanum, each two Drams; of old Ca:.  
nary, a sufficient Quantity to dissolve the moist and dis-  
solvible Ingredients; and os clarified Honey, triple the  
Weight of all the dry Species : Make it into an Electuary.

This Is likewise made with *Syrapus de Meconio* instead of  
Honey.

- This hath continued the fame in almost all the Dispensatories  
it hath yet passed through, and is not only the capital Alexi-  
pharmic of our Shops, but of all *Europe.* It has a great deal  
more wrote about it,\* than could be contained in tho largest  
Volume: We shall therefore content ourselves with as short  
Remarks upon this grand Medicine, as is consistent with that  
Acquaintance every one in the Practice of Physic ought to  
have with it. That we frequentiy call it *Fenice Treacle,* is from  
the great Quantities made there, and thence transported to  
most Parts of the World. As this has passed through many  
Ages, and the Hands of many, in their own Opinions, able to  
alter it for the hetter, there are abundance of different Recipes  
extant in Dispensatory Writers; and this of our Coliege  
seems to be one of the best; that in the *Augustan* Dispen-  
satory differs littie from it. *Diernerbroeck* greatly extois the  
Multiplicity of Ingredients in this Composition, and had odd  
Notions of the united Efficacies of such Ingredients arising to  
a much higher Degree, and exalting the Virtues of each much  
beyond whet they were possessed of when separate. Mons;  
*Chorras,* a *French* Author, has wrote a whole Treatise upon  
the Theriaca, and is Very particular upon each Ingredient, but  
says nothing worth Notice here. *Xvielser,* in his AnimadVer-  
fions upon the *Angustan* Dispensatory, says most to our Purpose,  
in which he has followed *Nuerceian.* Many Ingredients are  
by them justly found Fault with, as not at all agreeing with  
the Intention os the Whole, such as Agaric, Rhubarb, Vi-  
triol, *etc.* The Troches of Squilis are likewise rejected, with  
those of the Viper; because the manner of making them into  
those Forms, destroys the Virtues which they are intended to  
retain. If therefore such were omitted, and others proportion-  
ably increased, so that the Opium might still heve the same  
Proportion to the Whose, the Medicine would be much the

' better. \* .

. In the .Dispensation of this Medicine, *Tsvaelfer* divides **the**Ingredients into several Classes, according to their Similitude  
of Textures; fome to he dissolved as the Gums, and the other  
powdered separately, and afterwards mixed: But such a  
Trouble seems-altogether needless; for. some *os* the more  
tough and moist Ingredients will beat well enough with such as  
are drier, and more brittie, and pass the Sieve together ; and  
some eVen powder the Opium itself, which is as good a way  
as any, if it has been already' cleanfed of its Faeces. All the  
Herbs ought to be cleared os their Stalks, and to be as fresh as  
possible; and the Roots should be freed from every thing that  
is unsound or decaying. The Saffron, if its Colour he insisted  
upon, may be powdered separately, and put into the Wine,  
drawn .from the Vipers. The Galbanum, Turpentine, *etc.*must be first strained, and mixed with the Honey; and then  
the Species fisted in leisurely, another stirring it all the rime,  
that it may be well mixed; and last of all, the Wine is to be put  
in. This is a noble Medicine, and cannot be exceeded by any  
Composition as an Alexipharmic, and a Cephalic; for there is  
scarce any particular View, winch any Symptom can give in  
either of these Intentions, sor which there are not many Ingre-  
dients herein of great Efficacy provided. It is a good Opiate,  
and may more safely be taken than many os the plainer Opi-  
ares, in Cases that require some Stimulus to be used ar the sanio  
time, with such things as procure indolence; because such  
alone are apt to occasion Stagnations, and other Inconvenient  
cies. There is one Grain os Opium in each sour Scruples,  
and theresore.it may he given from one Scruple to two Drams,  
as the Strength and Circumstances of the Patient require.

Many here heve a Prejudice, that this Medicine, made in  
*England,* is not so good aS whet comes from *Venice,* as if the  
Name, which by mere Accident it has obtain'd, confined it  
**to he** made good onlv in that Place t and their Viners.

they say, are much better than any other. But there **is no**Foundation for this ; for tho’ their Country is hotter, and so  
may the more rarefy the Viperine Juices, in which their Efficacy  
herein consists; yet the manner of their making them into  
Troches loses so much *of* theirVolatility, that the way we have  
here directed to manage them, carries much more of'their  
Virtues into the Medicine. Besides, this is but a naked Sup-  
position, and in which there does not seem to be any Weight ;  
for if we may judge by their poisonous Properties, the Bites  
of our Vipers, at the proper Time of the Year, which is the  
hottest, are as efficacious and deadly as theirs. But to end all  
Controversy on this Head, if a proportionable Quantity of  
the Volatile Salt, drawn from these Creatures, be put into this  
Medicine, instead of any other Preparation, the Virtues will  
then be exactly the fame ; for the Salt which is produced from  
one, tho' it does not rise in such Plenty, is however of equal  
Virtues with that which comes from another. But if any  
other Country has the Advantage over us in this one Ingredi-  
ent, ours has it much more in another of aS great, if not  
greater Moment ; and that is, in-the Saffron; for that which  
our own Country produces, is of four times more Strength  
and. Goodness, upon every Account, than any which comes  
from abroad. This foolish Opinion, of the foreign Theriaca  
being better than what is made here, has occasioned the com-  
mon People to be cheated, as they too much deserve, with the  
worst of Medicines for right *Vinice* Treacle. For they, ima-  
gining that to be the proper Place of its Manufacture, and that  
it can come from thence genuine, at cheaper Rates than it is  
here sold at in our Shops, please themselves much with a Tin-  
pot, at a low Price, of a dirty Sailor, who pretends to heve im-  
ported it, wrapt tip with printed Directions In the *Italian*Tongue; whereas some os our Druggists, and unworthy Whole-  
sale Dealers in Pharmacy, make this wretched Stuff os little  
else than the Sweepings of their Shops, have the Very Bills  
printed in *London,* and put it off in this Disguise, upon such  
simple People. In Reality, no Country can make this cheaper  
than ourselves, and not. easily so cheap, because many of the  
Ingredients are furnished us from both *feae Indies.* And no one  
here, buying every thing to the best Advantage, can make it  
for so little as three Shillings a Pound out of Pocket; and there-  
fore any one may judge what that must he, which is sold for  
less, as it. is by these pretended Importers. They who have  
any Suspicion, that this is an Injustice upon their *Fenice* Treacle.  
Merchants, may be satisfied at almost any Printer's, who print  
and keep by them such *Italian* Directions ; unless they can per-  
suade themselves, that an Apothecary at *Venice* .is forced to  
send to *London* to have his Bills printed. - . . . ..j...-

. This one Remark more the present Practice will not suffer  
us to omit, which is making this Medicine into an Electuary"  
with *Syrupus de Meconio,* instead of Honey; but such who  
think there is equal Reason for so doing, proceed upon a great-  
Mistake. The Diascordium is calculated for an Astringent,  
to which Intention. Honey is opposite, because it attenuates'  
and deterges, and therefore with great Reason was the *Syrupus  
de Meconio* substituted in its Room ;shut in an Alexipharmic  
Composition, as the *Fenice* Treacle is, to reject Honey, which.  
is of the same intention, and very powerfully so too, and sub-  
statute what is contrary, unless by Accident, seems to be owing  
more to Whimsy, or the Vanity of leading an example, than  
any good Reason. Opiates indeed contribute somewhat, which,,  
we say, by Accident, forwards the Intention of an Alexiphar-  
Inio A.h.ut in the *Theriaca* there seems to be a full Proportion:  
Of Opium already; .so that by. the Addition of the Draco-  
dium, instead of procuring that easy Relaxation which favours  
the Operation ofan Alexipharmic, there is induced such an In-  
sensibility, that the Secretions will rather be diminished than  
inlarged; that is, instead of warming the Patient into A Sweat,  
he will he dozed into.a Stagnation, and so have a Fever, which-  
might be soon thrown off, changed into, one of a putrid malig--  
nant Kind. - And instances, of this .Nature I have - more than  
once met with, from .the. common *.Fenice* Treacle, when im-:prudently taken, or in an Over-dose; ;anff therefore such Ac-  
cidents are much to be seared, when this Alteration comes more-  
to take Place. The greatest Reason which can be. alledged for-  
this Practice, is. the Honey, disagreeing with some particular  
Constitutions; but one Instance of this does not happen to a  
hundred of the contrary r-And, if this is sufficient, it pleads-  
shrine same Alteration in most of . the Officinal Electuaries, be-  
cause there are lew of them without it. *Tsuincsis Dispensatory.*

*. Fluency* is undoubtedly right in his Remark with respect **to**che Change of Honey for Diacodium in this Composition ;  
for.if.it is made without Honey, it must he a Medicine Very  
different in every respect from the. truo *Tbociaca Andromache ;*because Honey, by. its Fermentation, induces a Very great  
Change in ail the ingredients which enter the Composition of  
*this Capital* of the Shops, and unites the Virtues of all; the Sim-  
ples together, so aS to become altogether aS one, and to act  
with Uniformity in the Compound.:..'. ... .. ῖι .

..The Receipt of xHyredsix has.the Ashes of Crawfish, burnt in-  
thin Composition. . ... ..

ὓ **ANDROMACHI ANTInoTUs AD CALCULOSOS;** *Andr orna.,  
chusts* Medicine for the Stone and Gravel. “It breaks the Stone  
by Degrees, and expeis it, thoroughly cleansing the Bladder,  
till the Urine is at last discharged pellucid ; and, what is of  
greatest Moment, works so perfect a Cure, that the Stones  
shall not grow again. It is thus prepared: -.

Take of Seed of Wild Carrots, Anise, Cucumber-feed hulk-  
ed. Seed of Smallage, Parfley, Myrrh, each a Dram and an  
half; Cassia, Cinnamon, *Celtic* Nard, each oneDIam; bruise  
them in Water, and make them up in the Form of small  
Lupines, to be taken fasting every Day, for thirty Days  
together, in a quarter of a Pint os Water. *Artius, Tetri.*3. *Serm.* 3. *Cap.* i3.

**ANDROMACHI COMPOSITIO AD DENTES MOLARIS,** *An~  
dromachusts* Composition sor the Grinders or Cheek-teeth,  
which easeth the Pains thereof in an Hour, is made of

. Pepper, Pellitory of *Spain,* Juice of Spurge, Galbanum, .  
of each an equal Quantity. Make them up with Galba-  
num, and put the same into the Hollow of your Teeth.  
*Idem, Tetr.* 2. *Serm. An Capo* 33. .

**HEPATICA ANDROMACHI CYPHoIDES.** The Hepatio  
Cyphoides of *Andromachus,* good in all Diseases of the Tho-  
rax. \* . ‘ . ς'

Take of Raisins of the Sun, twenty-five Drams, some have  
it a hundred ; of Saffron, a Dram ; of Calamus Aromaticus,  
two Drams; of Bbellium, Juncus Odoratus, each two.  
Drams and an half; Cinnamon, Cassia, Spikenard, each

... half a Dram; Myrrh, Turpentine, each four Drams.;  
some have it sixteen; Aspalathum, a.Scruple; Honey,  
sixteen Drams; Wine, a sufficient Quantity. *Actuarius,  
Meth. Med. Lib. 5. Cap.* 6. See CYPHI.

ANDRONIS MEDICAMENTUM PRO CANCRO..  
*Androids* Remedy sor a Cancer in any Part of the Body... . -

Take of the Rind of Pomgranate, ten Drams twenty-five  
Grains ; of Birthwort, nine. Drams twenty-two Grains'  
and a half; of Aloes, four Drams ten Grains; of Myrrh,  
two Drams five Grains; of Galls, eight Drams twenty  
Grains; of Plumous Alum, three Drams seven Grains  
and a half; of Flos fEris, two Drams five Grains. Bruise  
them, and sift them Very carefully ; then pour .to them *qcf*much *Cretic* Raisin-wine, as shall make it of the Thick\*  
. theft of Honey. Keep it in a glass Vessel; and whea  
there is Occasion, take it diluted with austere Wine. This

. Medicine is good for Carbuncles, for the Ignis Saces, and’  
for the Girdle, which the *Greeks* call *Herpes-* ζέρπηςτα  
*Scribonius Largus, Casi.* ι3... . δ᾽ -

**ANDRONIS MEDICAMENTUM IN UVAM.** *Ύ Androofs RC-..*medy for-the Swelling of thssUVula,. consists of. ? .

Plumous Alum, Squama AEriS, Vitriol, Galis,.Myrrh, Misy.

Bruise and mix them together, adding by Degrees,, as mucin  
austere Wine as will make it of the Consistence of Isonetr.?

*. Celsius, Lib. 6. Cap.* i4. . Ϊ T ... r . \*.

**; ANDRONIS PASTILLI.** *Androrsts* **Trochnce ... ...** *frscsaf*- ...... ... .. ....... .i *e .. . .i \**

These Troches, *Artius* tells us, are good *for* running Ulcers4  
also for Inflammations of the. Uvula, and Defluxions on **the.**Tonsils,, if the Parts. under the Chin the anointed therewith..  
They take off Films from the Eyes, and are serviceable su the  
Beginning of Inflammations of the Glandules about the Groins,,  
and for Abscesses in.the intestines after they are broken, when-  
taken in a Clyster with two thindsofaPimosWater, if th ere he .  
a Fever, or' with the like Quantity of Wine, if there he none;  
They also deterge the Callosities of Ulcers, and are thus pre-  
pared: ’ ' ’ ' ‘ - ς c '. χχ

Take of BalaustineS, ten prams twenty-five Grains; Gash,.  
- Birthwort, each eight Drams twenty Grains; Plumous *e*Alum, Vitriol, each four Drams ten Grains (some take  
but half that Quantity) ; Myrrh, Aloes, Frankincense,.  
Saffron, each one Dram two Grains and a half.' Bruise  
them first separately,, and then all. together,r and reduce  
them into Troches. *Aetius, Tetr. Agio erm.* 2. *Cap.* 50a

« .st « X ss ... .. . - ς. - \_ ’ “ : - \* ‘ ' . . —

*P. AEgineta* give? a somewhat different Preparation of **these**Troches,.aS follows: . .... .. - \ . '...

. . ν . . ' L -:ιΛ . . . ..« . *. .. . . . .-.e*

’ Take oTBalaustines, ten Drams twenty-five Grains; Galls,  
\* eight Drams twenty Grains-; Myrrh;- Round Birthwort,  
each four Drams ten Grains; Vitriol, Saffron; Plumous

Alum, Crocomagna, Misy, Frankincense, each two  
Drams five Grains; bruise them in austere Wine or VI-  
negar. *P. Atgineta, Lib.* 7. *Cap.* I3.

He reckons it among the vehement Kind of Remedies for  
the Herpes and Carbuncle. Lila 4. *Cap.* 20. *et 25.*

ANDRONiON, the same as ANDRoNIs **PASTILLI.**

ANDROSACES, Ossic. Chab. 458. *Androface annua spu-  
ria,* Ger. 425. Emac. 53I. *Androface Matihioh altera, J. B.*3. 368. Rail Hist. 2. Io86. *Androface altera major Mat-  
ykicii.* Park. Theat. 56o. *Androface vulgaris latifolia annua,*Elem. Bor. IoI. Tourn. Inst. I23. Boerh. Ind. *A.* 20I.  
Rupp. Flor. Jen. I3. *Auricula urse asemis, Androface dicta-  
major,* Herm. Hort. Lugd. Ban 82. *Sanicula ajscnis Planta,  
Androface dicta major.* Hist. Oxon. a. 556. *Alstne ajscnis, An-  
droface dicta major,* C. B. Pin. 25I. SUMMER NAVEL-  
WORT. *Dale.*

Androsaces grows in the maritime Places of *Syria.* It is a  
flender Herb, with thin Stalks, bitter, leafless, bearing sinall  
Pods on the Top, which contain the Seed.

The Quantity of two Drams hereof taken in Wine power-  
sully provokes urine in hyofopical Persons. The Decoction of  
the Herb, and the Seed, work the fame Effects It also makes  
a useful Cataplasm for the Gout. *Diofc. Lib.* 3. *Cap.* I4O.

*Oribastus* reads λ,ευκὴς *white,* instead of λεπτὴν *strnder. Pliny*also fays it is white, and in the rest agrees with *Dioseorides.*

It is a Plant which pushes up many hairy Stalks bass a Foot  
high ; the Top, dividing itself into six or seven Parts, forms a  
sort of Umbel; its Leaves are long and large, hairy, nervous,  
Iikethatof Plantain; indented all round, spreading round about  
the Stalk upon the Ground ; the Flower is small, and, white,,  
spreading at the'Top, and cut into five Segments ;, when the  
Flower withers, a little orbicular Fruit is found as big as a Pea,  
containing many longish and reddish Seeds ; its Root is short  
and fibrous: It grows in maritime Places, amongst: Corn, and  
in Woods; ircontains a great deal of Salt., ...

It is aperitive, and good for the Dropsy, for Retention of  
Urine,, and for the Gout. ' . .

*Androface* is fo colled, from its bringing Relief to Men  
ανδρὶ ἀκος φέρουσα. *Lernery de Drogues.* Λ . .

' ANDROSAEMUMs Oher... *Androfaemum vulgare.* Park,  
Theat. 575. Merc. Sot. I. I9. Phys. Brit. 8. Men.Pin. 8.,  
Rail Hist. 2. IO2.O. *Androfaemum maximum fruteseeni. Cl.* B.  
Pin. 280. Boerh. Ind. A. 242. *Hypericum maximum (quast  
frutescens) bacciserurn.* Hist. Oxon. 2. 472. *Hiyperitum maxi-  
mum Androfaemum vulgare dictum,* Raii Synop. 3. 343. . *Sici-  
liano, aliis Ciciliana, ver Androfaemum,* J. Β. 3. *384. Sici-  
liano, vel Androsaemum, tota bona quibufdam, Glumb.-,tyso.. Cly-  
menum Italorum,* Ger. 437. Emac. 543. TUTSAN, or  
PARK-LEAVES. ,ss

. It grows in Hedges and Thickets, -flowers in *July and Au-  
gust* ; rhe Flowers, Leaves and Seed are ufed, which heve the  
same Virtues as Hypericon, or St; john’s-wort.; *zDale.*

', AndROS-EMUM is by forne -called *Dionyseas,* by-iothers  
*Aseyrus ,* but there is a Difference between this Plant and Hy-  
pericum and Aseyrus. It is a shrubby plant, with final! ilender  
Twigs, and Branches of a scarlet Colour, and Leaves three or.  
sour times as large-as thefeof Rue,‘ which, being bruised, yield  
A virraus Juice. At the Head it expands: itself into *a.* Multitude  
of Branches, about which . grow frnall yellow Flowers,; pro-  
ducingA Seed in'the Calyx, like that-of black Poppy, and di»  
stinguifhed by Marks, as; if they were engraved. - *-e.s*

The Leaves, btiofed,yield a resinous Smell. The Seed, pound-.  
ed, and drank to the Weight of two Drams, purge; Bile. It  
is .veryufeful in-the-Sciosica-ς'but after Purging, the Patient is  
ed. take aDraughtof.Water. The Herb, used in a Cataplasm,  
heals Burns, and stops: Haemorrhages. *Dioseorides, Lib.* 3.-'

^i&QSAEMpN, or, as otherS; call it, *Aseyrus,* is not-  
unlike Hypericon, only hasgreater, thicker, and redder Stalks. .  
The Leaves are whitey -and shaped like those of Rue. The  
Topsof the Herb, ryuised, yield, aiBltiod.-like Juicc.\ It springs  
up .among the Vines, and is commonly digged out: about, the:  
Middle of *Autumn,* and hung .tip,' Bruifed with the Seed, and  
taken to the Weight of two Drains, either in theMoming or  
aster Simper, innydromeljWine,; or. pure Water; it is a good  
Purge.: But the;next Day, /the Patient mushtake theWeigsit..  
Of a joram of Capeurimt mixedjwithtB.ofin» and;sour Days:  
after, he is to do the fame. After Purging,, the Patient,, fif *.of;*a rphest Constitution, ought to diinlc Wine , .in weak. Water.  
*Pliny, Nir. ay-, Cap. suo* νεὐ -4. έ ;

"It is. called *AndrofaeinpnAscsin. urisua.* Man, and ᾶιμαν Blood,  
from its makingstheEingers of those.whe rub it, look bloody.  
*Oribasius, IAede Coll. Lib.* ir. *A.* : r. ε,ι' 1

The Stalks of *Tutsan* -grow sto. the two Or three Foot  
high, smooth,'- reddish,.. and not much branched, having  
twp. large, oval -brownish green-heaves-set opposite, at every  
Joint on.very short Foot-stalks-thofo next .the.Ground,.,  
heingimually sinallest. On the Top of the Stalks grow the

-Flowers, several together, on pretty long Foot-stalks, of five  
small yellow roundish Leaves apiece, with Stamina in the Mid-  
dle, ofthe same Colour, yielding a reddish Juice, upon heing  
rubbed between the Fingers, and are succeeded by Berry-like  
Seed-vessels, green at first, and afterwards of a deep-shining  
Purple, almost black, containing small Seed in a purplish Juice;  
The Root is somewhat thick, of a reddish Colour, with many  
Fibres. It grows in Hedges and Thickets, and flowers in  
Mr -.mi ;

-- The Leaves and Flowers are sometimes used, and are count-  
ed much of the Nature of SI. John’s-wort, being a good  
Wound-herb, ufed.both inwardly and outwardly; and is there-  
fore called in *French, Trnctfoin,* signifying *Allshcal,* and from  
thence by us corruptly, *Tutsan. Miller Bot. Oof.*

It contains a great deal of Oil, and a moderate Quantity of  
Salt and Phlegm. .1;...

It is aperitive, vulnerary, resolutive, good for the Stone, to  
kill Worms, to rosist Malignity, and guard against Madness,  
heing externally or internally apply’d: *~ Lernery de Drogues.*

ANDROTOME. See ANDRANAToinE: .

ANECPYETUS, Άνεκπὐἰτος, unsuppurated, from a Neg.  
and ἱκπὑετος, suppurated. See EcF.YEMA.

ANEILEMA, ANEILESIS, Άνείλημαί Ἀνείληιπς. from  
ἀνειλέω, to roll up, or involve. An Involution, particularIy  
such as.is caused by Gripes mid Flatulencies in the Intestines.  
*Hippoc. de vet. Mede*

ANEMONE, a.Plant which Botanists, from the Time of  
*Diofcarides,* have distinguish’d into the cultivated, and wild  
Sort. The first is,

*Anemone hortenses,* Offic. *Anemone Geranii Rupertiani folia  
coeruleo: an Diofcarides,* C. B. Pin. I74. Tourn. Inst. 277.-  
Hist. Oxon. 2. 426. *Anemone Gcranifotia,* Ger. 3o4. Emac.  
377. Rafi Hist. I. 625. J. B. 3. 405. *Anemone Geranii folia,  
radice tuberose, store caeruleo et albo.* Chain 462. *Anemone  
tenuifolia Jive Geranifolia coerulea.* Park. Paced. 208. GAR-  
DEN-ANEMONE. *Dale.*

The wild Sort is.call’d

*Anemone scylvestris,* Ossic. *Anemone Matsoioli,* GeI. 3O4.  
Emac. 377. *Anemone fylvestris alba major,* C. B. Pin. I 76.  
Raii Hist. I. 627. Rupp. Flor. Jen. I28. Tourn. Inst. 277.  
Elem. Bot. 239. Boerh. Ind. Α. 37. Buxb. 23. Hist. Oxon.  
2.4.25. *Anemone fylvestris latifolia alba. Jive tertia Matthiali,*Park. Farad. 202. *Anemone magna alba, plurima parte anni  
starchs,* J. Β. 3: 4II.. *Anemone magna alba, capitulo tuberose,  
caule densa lanugine, canescente,* Chab. 464. WILD ANE-  
MONE. . -

Of this Plant there are two distinol Species, the garden and  
the wild ANEMONE ; and each of these Species is subdivided  
into several others, hut especially the former, which is care-  
fully cultivated in Gardens, on account of the Beauty of its  
Flowers. Their Roots fend forth Leaves, that are almost  
round, and resemble those of *Sow-bread, Mallews, Grands-  
bill,* or *Sanicle.* : Some of thefe Leaves are pretty large, and  
others sinaller ; feme of them are deeply indented, and others  
nofsomuch; but still each Leaf has its proper Stalk. From  
the Middle of thefe Leaves arise sinall Stalks, hare half way up,~  
where, they are adorned with three Leaves, disposed in Form of  
a *Collar.* Each of these Stalks bears at its Top a beautiful large  
round Flower, with several Leaves disposed like those of a Rose:  
This Flower is single or double, yellow or white, purple or:  
carnation,, blue or red, violet, or diversified with several Co- .  
lours, and sometimes adorned with a Tuft. When this Flower -  
salis, a.Fruit appears in its Place, which is generally of an oh-.  
long Figure, and includes a Nut filled: with several -Seeds, *i*each of which is covered with, its proper Huik, which is gene-  
rally soft like Cotton. Its Root is fungous or knotty, and has  
many Fibres sprouting oiit from it. Thewild Anemone grows  
in rising Grounds, and mountainous Pisces. Both Species of  
this Plant contain a great deal of Salt and Oil. ...

This Plant is detersive,- aperient, molding, vulnerary, de-  
siccative,-but generally dtis. only used external^. It is used  
in Ermines and Collyiiums. for Ulcers of the Eyes. *Lerncry  
de- Drogules. : . . -*

There sire two Kinds of Anemone, thewild, and the culti-  
vated. Of the letter, one Sort bears a scarlet Flower, another  
a whitish, or milk-white, and another a purple one. The  
Leaves, are like thofe of Coriander, tho’ but stightly jagged near  
the Ground.. The Stalks are downy, flender, bearing Flowers  
like thofe of the Poppy, anil inclosing a black or iky-coloured  
Head in the Middle. The Root is of the Bigness of that of the  
Olive, or bigger, and divided as it were by Joints. The wild  
Kind in larger in all respects than the other, having broader  
and harder Leaves, and a longer Head, a scarlet Flower, with  
small and flender Roots, more in Number than the former.  
There is one Sort of it which has black Leaves, and more of  
Acrimony than the rest.

Both Kinds are acrimonious; for which Reason the Juice of  
:the. Root, snuffed up the Nostnis, is good to purge the Head.  
The Root, chewed, draws out Phlegm. Boiled in Passum,

[γλυκὑ. Wine made of Grapes that have hung on the Vine till  
'wither’d by the Sun] and apply'd as a Cataplasm, it cures In-  
flammations of the Eyes, deterges Specks, and whatever causes  
Dimness of Sight, and cleanses Ulcers of Filth. The Leaves  
and Stalks boiled in Ptisan, and eaten, breed Plenty of Milk  
in the Breasts, and made into a Pessary, provoke the Menses ;  
apply'd in a Cataplasm, they remove the Leprosy.

Anemone is by some called *Phenion.* There are two Kinds,  
the wild, and what is.cultivated in Gardens.; both delight in a  
sandy Soil Of the garden Kind there are several Sorts ; for  
one bears a scarlet Flower, which is the most common, another  
a purple, and a third a milk-white Flower. The Leaves of  
these three Sorts are like those of Smallage. They seldom ex-  
ceed half a Foot in Height, and have a Top like that of Aspa-  
Tagus. The Flower, never opens but when the Wind blows,  
whence it takes its Name. The wild Kind is the larger, has  
broader Leaves, and a scarlet Flower. Many have mistaken  
this sor the Argemone, others for the red Poppy., but there is a  
freat Difference between them, sor both these come later in  
lower, nor have they the Juice or Flower-cups of Anemone,  
and are only like it in having an Asharagus-top.

The Anemones are good sor the Pains of the Head, and sor  
Inflammations ; help Diseases of the Uterus, and procure Milk  
in the Breasts. Taken in Ptisan, or apply'd to the Part in  
Wool, they. provoke the Menses. The Root chewed in the  
Mouth draws out Phlegm, and makes .the Teeth sound ; and  
**the** Decoction thereof cures Inflammations .in the Eyes.

The Magi ascribe much to their Virtues. They order, thet  
aS soon as you see the Plant that Year, you take it up, saying  
these Words, That you gather it as a Remedy *for Tertian* and  
Quartan Agues ; then wrap it up in a red Cloth, and keep it.in  
a shady Place, till there be Occasion to tye it about the Patient.  
The Root - of that winch bears a scarlet Flower, bruised, -and  
apply’d to the Flesh of any Animal, by its putrefactive Quality,  
causes an Ulcer, and is therefore used as a Detersive for Ulcers.  
*Pliny, Lib.* 21. *Cap.* 23.

All the Anemonies are acrimonious and detersive. Drawers,  
and endu'd with the Faculty of opening the Mouths of the  
Veins.. *Dribas. Med. Coll. Lib.* I5.

*Emplastrum ex Anemone.* The Plaister of Anemone.

Take of Colophony, seventy-four Drams; . liquid Resin of.  
the Pine-tree, Wax, each four Ounces ; Oil, nine  
. Dunces; fresh Flowers os Anemone, taking out the black  
that is in them, and cutting off their Bottoms, eight  
. ...Ounces: Boil the Colophony with .the Oil .over a Fire  
' made of the Word of the Pine-tree; stirring it with a Spa-  
i - thula os the Tteda,. [a Sort of Pine-tree] till it comes to  
. a solid Mass ; then add the Resin,. and boil it again, till.’  
- ?. .it will no longer soul; when put in the Wax, and as soon  
; . aS this is melted,', take the Medicine off the Fire, and  
*z* . pour it upon the Flowers bruised in a Mortar, and work  
them together .with your Hand, smeared in Oil; for they  
. are glutinous, and no Water must come near them. . '.

.ItjS good for green Wounds, and . bruised Flesh ; for old,  
malignant, oyer-grown Ulcers, winch are herd to cicatrize; .  
for Bites of venomous Creatures ; for swellsd and inflamed  
Joints, that are painful, and not without.Dissiculty moveable ; .  
for Strumae, Fistulas, a Ganglion, Steatoma, and Furunculus ;  
for finuous as well aS spreading Ulcers ; sor AbfceffeS in any  
Part, but especially the Breast. . To stop an. Haemorrhage at  
the Nose, they lay a Bolster of it.uponthe Stomach, or it may  
he apply'd to the Forehead ; in short, it mollifies, discusses,  
contradis, dries, \_ and is an Anodyne. . . ς . .

-If you had rather have it prepared with Vinegar,

Let the Flowers of the Anemone be cleansed, and these .Bot- ..

.. toms cut off as before, and then.dry’din the Sun, and  
afterwards kept in a glass Vessel; then take os them eight  
- Dunces, and pour? thereto three Attic Hals-pints of the '  
....strongest white Vinegar, in .which let them macerate a \_  
τ Day and a Night. Aster this, .work jt with your Hands, .

and by Degrees press out all the Juice: Then take of the ...  
.? : brightest Colophony, forty-two Drainsliquid Refin of  
. the Pine-tree, Wax,. Oil, each sour .Ounces ; -Juice of -  
.. the Anemone, two Attic Half-pints i and a quarter of a :

Pint: Boil the Colophony with the Oil at a stow Fire of  
. the Wood of the Taeda, stirring it continually with a Spa- .

thula of the same Wood, till it comes to a proper. Consist-  
ence; then putin the Refin by Degrees, lest it should  
so boil over the Vestel, and boil all again till they come to a  
- solid Mass; when put in the Wax, which heing melted, '  
/ take it off the Fire, stinting it with the Spathula,.till it  
.. ceases boiling j then pour in rhe Juice by Degrees, care-  
' fully watching that .there he no Ebullition, to winch it is  
very subject, so as to run over. While the Mixture is

\*. thus gradually made, the Medicine takes a various, pur-  
. ple, and pleasing Colour. All the juice being thus poured

in, and united with the rest, remove the Whole into **a**Mortar, and when it is cold work the same with your

. Hands, till all the Juice is absorbed.

This Medicine is good for the lame Purposes as the former.  
Only is of a milder Nature, and , more accommodated to the  
Bites of Dogs, and Venomous Creatures. Being diluted with  
Oil of Roses, it is proper for Ulcers in the Arms and Pudenda,  
-when they need only mild Remedies. *Actius, Tetr. An Scrrn.* **3.  
-Cap. I2.**

. ANEMONOIDES,

Ossic. *Anernon cedesstore albo,* Boerh. Ind. A. 36. - *Anerno-  
noidesstore mayors.* Dill. Cat. Gissi 39. *Anemone nemoroso, sure  
majore,* C. B. Pin. I76. Buxb. 2o. *Anemone nemorum alba.*Ger. 306. Emac. 28y. Ran Hist. I. 6I4. Synop. 3. 259.  
*Anemone nemorum,* Merc. Bot. I. I9. Phyt. Brit. 8. Mer.  
Pin. 8. *Ranunculus phragmites albus vernus, J. B.* 3. 4x2.  
Chomel. 653. Tourn. Inst. 285. Elem. Bot. 24I. *Ranuncu..  
lus nemorosus albus simplex.* Park. Theat. 325. *Ranunculus,*Chain 465. *Nemoroso, flore roseo albo expanso,* Rupp. Flor.  
Jen. 128. WOOD ANEMONE. *Dale.*

- The Word is derived from 'Ανεμώνη, Anemone, and εἴδος.  
Form, that is, in the Form or image of Anemone.

The Characters are;

The Root is perennial, and for the most part gnnnofe and  
creeping; the Leaves are finely cut, three of which, for the  
most part, surround the Stalk ; it hath a fingle Flower upon  
each Stalk, which consists of many Leaves, and are expanded  
in Form of an Anemone, having many Stamina or Threads in  
the Middle; the Seeds are collected into an oblong Head, and  
are, in Shape, like those of the Ranunculus, having no Dbwrr  
adhering to them. - νύ

*Miller* enumerates six Species, and *Bocrhaave tynefae,* of  
this Plant. . ’ '

The *Anernonoides store albo* is found wild in the Woods;  
in most Parts of *England*; some of the other Varieties *Millcr*says he hath gathered in great Plenty, in the Wilderness be-  
longing to the Gardens at *Wimbleton* in *Surry,* which were pro-  
bably at first taken from some Woods in *England.* In thin  
Place they increase so fast, that the. Surface of the Ground-is  
cover'd with them in the Spring; and whet is more remarkable, '  
there the large blue and double Sorts are the most common.  
*Miller\*s Dictionary.*

. It is an hot and acrimonious-Plant, that will raise Blisters on  
the Skin. *Dale.*

.ANEMONOSPERMOS, from ἄνεμος, Wind,-and.  
σπέρμα. Seed, hecaufe the Wind easily bears away the Seed.

- The Characters are; υ

- It hath an hemispherical scaly Cup ; the Flower is radiated  
like the Ragwort ; but the Seeds are copiously surrounded with  
a pappous Down, as are those os Anemone. ;

*. Miller* enumerates four, and *Bocrbaave* six. Species of this  
Plant. ... -

They were originally brought from about the *Cape-of-good- -  
Hope,* into the curious Gardens in *Holland,* where they have  
heen propagated, and from whence they heve heen distributed-  
into the several Parts os *Europe,* where they are now growing.  
*Miller?s Dictionary.*

ANEMOS, Ἄνεμος, Wind. See **VENTUS.**

ANENCEPHALOS, Ἀνεγκἐφαλος, brainless, from α Neg. ',  
and εγκέφαλος, the Brain. In general it signifies mad, or  
foolish, butin a more restrained Sense may be apply'd to such  
Monsters as are born without Brains, on which *Bonetus* in his :*Medic. Sepsentr.* has made a Collection of Observations.  
*Castellus. , . .. . . .»*

ANEOS, Ἄνεως, in *Hippocrates,* as expounded by *Galen,*signifies ἄφωνος καὶ τὸν νοῦν ἐμπεπλεγμένος; - " one shuck with  
" the Loss of his Voice and Reason; " and by *Hefychiussu-  
dvsca* are said to be ἄφωνος καὶ ἐκπλώξβ ἤσυχοι, " seized with a  
". Stupor and -Loss os Voice.” Ἄνεως is put for ἄνεος, ac- .  
cording-to the *Attic* Dialect. *Foesius. - , /*ANEPICRITON, Ἀνεπίκριτον,' something os which **no**Judgment can he formed, that is neither the Object of the Un-'  
derstanding. nor Senses, from, lon Neg. and έπικρίνω, to judge. -  
Thus ἀνεπίκρἰτος διαφωνία, with the Empirics, [a Sect of Phy-  
sicians among the Antients] signifies a Controversy and Disagree- '  
ment in Words about a thing that can never be determined or  
defined, because of its Acatalepfia, winch was a Word much  
in Use among that Sect, as *Galen* says. *Lib. de Sectis, etc. -*See **AcATALEPSIA.**

ANERECTOS, ἀνἐρεάτος, ἀνέριπότος, ἀνήρερίτος. From *a. '*Neg. and ῥήγνυμι, to break. Apply'd to Fruit or Corn, not -  
hull'd or broken in the Mill, or with the Pestle. Ἀνέρεάτος  
ἄρτος, in *Hippocrates, Lib. xcci re ah lev,* signifies Bread made of -  
Wheat not cleansed from the Bran. - - '  
ANESIS, Remission. *See* **REMISSIO.**

ANESTRAMMENA, άνεστραμμένα, from ἀναστρέφω, **to I**change, or subvert, in *Hippocrates,* is expounded by *Galen* to  
mean the same as *Anatetar a?maena. drdjsJapecyuiya,* from ἀνατα-

ydurris, to trouble, or disturb ; and 'tis appsy'd, he says, \* to Urine,  
to signify such as is turbid or thick, without, depositing any Se-  
diment aster standing. .

r.. ANETHOXYLA, 'Ανεθόξυλα. So the Tranflator, of *My-  
repfus* reads the Word, instead of ἀνυθόξυλα, as it is in *the Greek*Manuscript, and understands it of the woody Root os Dill.  
*Myrepfus, Sect.* 8. 6 -. . .. \_ νύ

ANETHUM, Ossie. Get. SE Fimac. I033. Ran Hist. I-  
4I5..Mot. Umb.. .36. J. B. 3. 6. Club. 384. Dillen. Cat.  
.Gish I36. Rivim Irr. Pent. *Ariethum hortense,* Co Β; Pin. I47.  
Tift. Oxon. 3. 3II. Tourn. Insta 3I8. Elem. Bot. 268.  
Boerin.Ind. A. 65. .Buxb. 2O. Rupp. Flor. Jen. 222. *Anethum  
Jjortensosive vulgare.* Park. Theat. 886. DILL. *Dale.*

\* . The Decoction of the Tops and Seed os dried Anethum, being  
drank, promotes the breeding of Milk, and easeth the Gripes  
and inflations, stops a Looseness and Vomiting, occasion'd by  
Humours floating in the Stomach, provokes Urine, and asswages  
the Hickups. Often used, it renders the Sight dull, and con-  
sumes the Seed. The same is also good in an Insession for hyste-  
rical Women. The Seed burns, and sprinkled on the Part, takes  
off.a Condyloma. *Dioscorides, Lib.* 3. *Cap.* 67.

*Pliny* adds, that the Root is used, in Water or Wine; to  
onointlnflammations of the Eyes *[Epiphoras.* The Seed, vehe-  
mently heated, and fmell’d to, stops the Hickups. Taken in  
Water, it takes off Uneasiness from Crudities. Tlie Ashes  
give Relief in a *Prolapsus Uvula. Pliny, Lib.* 20. *Cap.* I8.

The Root, heated, and applied to the Mouth of. the Uterus,  
provokes the Menses. *Oribas. Synap. Lib. I. Cap. 22.*

*Burnt,* and the Ashes sprinkled upon humid Ulcers; especially  
about the Pudenda, di sposes them to heal; and cicatrizes inve-  
terate Ulcerations under the Prepuce, *j* The green Herb, as  
having less Heat, and more Moisture, is a hetter Digestive and  
Hypnotic, but the dry is more diseussive. *Aetius, Tetr.* I.  
*Borm.* I.

This Herb, both in Root; Stalk, and ‘ Leas, very much  
resembles common Fennel, except that it seldom grows so tall, or  
so much branch’d; it bears such yellow Umbels os Flowers,  
after which come Seeds rounder, broader, and flatter than those  
. of Fennel The whole Plant is of a strong Scent, less pleasant  
than Fennel. *Dill* grows in Gardens, and flowers and feeds  
*in July* and *August,* The Leaves and the Seed are used.

♦ -Officinal Preparations from *Dill* are only the *Oleum Anethi-  
num,* made by infusion, and gentle Coction of the Leaves and  
; Tops in Oil. *'Miller Bot. Crffi.*

*.t,* I meet with nothing with respect to the Virtnes of *Dill*amongst the Moderns,; but.what has.been specifiedfrothDrdseo--  
*rides,* and the Authors above quoted.

*The Preparation of the Anethinum.*

Take of the Flowers of Anethum, eleven Pounds eight  
. Ounces, and infuse them m eight Pounds and nine Ounces

Of Oil for a Day ; then press them out with your Hands,  
and set the Oil by for Use. If you think fit to make a  
second Maceration, take fresh Flowers, and infuse them  
.. in like manner. ’ ,

It has the Virtue of mollifying and relaxing the Pasts about  
the Uterus; and is of Service in the periodical Returns os a Ri-  
i gor, heing of a warming Quality, fry which it relieves under

Lassitudes, and helps Pains in the Joints. *Dioscorides, Lip.* I.

*-Cap.* **6I. . . .’**

*Oribasius,* who. every-where transcribes *Dioscorides,* reads  
him as appointing equal Quantities of Oil and Flowers, that is,  
eleven Pounds eight-Ouncesof each. *Drib. Med. Col. Lib.* II.

**ANETH-INUli VINUM,’** *Dill Wine.*

Take of ripe, fresh, and sifted Seed of Anethum, nine  
Ounces, tie them .up in a Linen Bag, and pur them into  
ten Gallons two Pints of *Mustum* [Wine unfermented] ;

. let them macerate for three Months, and afterwards put up  
your Wine into proper Vessels. - :

It creates an Appetite, helps Sickness at the Stomach, and  
.Difficulty of Urine, and makes a sweet Breath.

After the same manner are made Wines of Parsley, Fennel,  
and Smallage, winch have the same Virtues aS that .OfDill.  
*Diofcorides, Lib.* 5s *Cap.* 73, 74, 7.5. . .

**OLEUM ANETHINUM,** *Oil of Dill,*

Is made of the fresh Tops of Dill, before the Seeds are grown  
solid and acrimonious; for it would be unfit for this Purpose, if  
.the Flowers were wanting.

Take only the green tender Tops, or Shoots, to the Quantity  
of an Ounce, and infuse -them in an *Italic* Pint of Sweet  
Oil. Let the Mouth of the Vessel be well closed, and the  
Vestel set to stand in the Sun for forty Days.

This is hotter than Oil of Chamomile, and is therefore pro-  
per for Lassitudes in the Winter, for it mollifies and moistens.

It-is also serviceable in feverish Disorders arifing from Phlegm,  
and in all Distempers, caused by Cold, especially where the TenA  
dons or Mu sales are affected. *Artius, Tetr. I. Serm.* i.

This Oil may he made, in case of Necessity, without Info-  
lation ; that is, hy boiling the dry Tops of the Dill in a double  
Vessel; and so may Ost of Chamomile, *etc.* he prepar'd ; but  
then these Oiis are weaker than those which are made os the  
green Tops, and suffer'd to stand in the Sum *P. AEgrneta,  
Lib.* 7. *Cap.* 20. .

The Method directed by the College for making the *Oleum  
Anethinum,* is thus:

*r \* - . . . \**

Take of the Flowers and Leaves of Dill, bruised in a mar-  
ble Mortar, with a wooden Pestle, four Ounces; Oil ofi  
Olives, one Pound : Expose them to the Mid-day Sun, in  
a glass Veffel well stopp’d, for a whole Week, and shake  
them together every Day ; then let them gently simmer in  
a Bath-heat, and press out the Oil; Put in fresh Dill,  
winch manage aster the same manner, and repeat the Pro-  
cess a third time ; then let them stand together for forty  
Days ; at the Expiration os which set by the Oil for Use,  
without pressing out the Dill.

) There is also aChyrnicai Oil prepar’d from the Seeds os Dill,  
in the following manner: -

Take two Pounds os Dill-seed bruised; of Spring-water  
twenty Pints: Let them he distill'd in an Alembic, with  
its Refrigeratory ; and then let the Oil be separated by a  
proper Funnel. ' so \_ . ...o' .

These Oiis partake of the Virtues of the Plant. . ’ - ‘ ;

ANETICUS, ἀνετικός, from ἀνίημι, to remit. An Epithet  
of such Remedies as heve the Virtue of remitting Pain,’ and  
are call'd Paregorics. *Castellus.*

ANEURYSMA, from ἀνευρύνω, to dilate much. An Aneu-  
rysm. ' .. '..'.τ

An Aneurysm may affect any Part of the Body, but most fre-  
quently happens in the Throat, where it .produces a Tumour  
call'd Bronchocele,' which is most incident to Worneninssa-  
hour, because os the Violent Retention of. their Breath. This  
Disease also affects the Head in the Parts about the Arteries,, or  
any Part of the Body where an Artery happens to be wounded ;  
as, forstnstance, when an unjkilfnl Operator, in attempting to  
open the Vein oftheCchit,. at the same time cuts thesubjacent  
Artery. " - '

Every Aneurysm is occasion'd either by a Transudation, an  
Anastomosis, or a Rupture, in both which Cases there is a gra-  
dual Extravasation of .the Blood, and Spirits, which are collected  
under the Skm. ..

The Characters of an Aneurysm are a small or great Tumour,  
of the Colour, of the :Skin,'Void of Pain, soft to the Touch,  
and seeming to he of a loose spongy Substance, yielding to the  
Compression os the Fingers so as almost to vanish, hut recurring '  
as soon as the Fingers are taken off; which Character is most  
remarkable in Aneuaysms of the Chin, and such others as are  
not occasion'd by a Wound: But where a Wound of the Ar-  
tery has preceded, and, .the Skin afterwards closing up, there has  
follow'd .a Dilatation of the Vessels, the Tumour is less soft;  
for the Blood, more .abounding with Spirits, runs into gru-  
mous Concretions, and extends the Tumour.

As to the Therapeutic Part, those Aneurysms which happen  
in the Head or Throat are accounted desperate, and are not  
attempted by Surgeons : For as soon as the Aneurysm is cut,  
there follows an excessive Haemorrhage, .with such a Profusion  
of vital Spirits, that tile Patient often dies under the Operation.  
But aS to an Aneurysm in the Cubit, we treat it in the follow-  
ing manner: ..'...

First, .we mark Out the Artery that extends itself along the  
. Internal Part of the Arm, from the Arm-pit to the Cubit.  
Then, in the same internal Part of the Arm, three or sour  
Inches below the Arm-pit, we make a simple Incision length-  
ways, in the Place where the Artery is .most obvious to the  
Touch ; then by degrees we lay the Artery-bare, by separating  
it from the Skin and the other incumbent Corpuscles ; we then  
. .take hold os .the Artery with a blunt Hook, extend it, and se-  
cure it by two firm Ligatures. This done, we make an Inci-  
' ston in the Part between the Ligatures, and fill the Wound with  
Powder of Frankincense, and, laying Lint thereon, apply a pro-  
per Bandage: After this, we proceed, with great Security, to  
cut the Tumour in the Cavity or Flexure of the Cubit, heing  
under no Apprehension of an Haemorrhage. After Evacuation  
of the grumous Contents of the Tumour, we search out the  
.Artery whence theBlood made an Eruption, and. having disco-  
Ver'd is, take it with a Hook, tie it in rwo Places, and make an  
Incision between them, as we did in the former Part , then  
filling up the Wound with Powder of Frankincense, as before,  
we procure a Suppuration. ‘ . .

For an Aneurysm in the Throat, a Plaister of Cypress is **a**.proper topical Remedy. *Actius, Totr. y. Berm.* **3.** *Cap.* IO.’

The Aneuryfm is a Tumour, soft to the Touch, and yield-  
ing to the Fingers, and owing its Generation to Blood and Spi-  
rits. *Galen* says of it: " When the Mouth of an Artery is  
" open'd, the Affection is call'd ἀνεήρυσμα [a Dilatation]:  
’ " The same thing happens, when, the Artery heing wounded,  
'. " the incumbent Skin is cicatrized, but the Wound of the Ar-  
. " tery remains, being neither conglutinated, cover'd with a  
" Cicatrix, nor shut hy Incarnation. Affections os this Kind  
\*c are. known by the Pulsation of the Arteries, or more especial-  
" ly by compressing the Artery ; for then all the Tumour diss  
" appears, the Matter that caused it recurring into the Artery.''  
So far *Galen* ; but we distinguish these Affections in the follow-

\* ing manner: Those which proceed from the Anastomosis of an  
Artery, appear of a more oblong Form, are deeply situated, -  
and, when impress'd by the Fingers, a Noise is perceiv'd.

' When the Affection is caused by a Rupture, no Sound is heard,  
- but the Tumour is rounder, and more superficial.

. Aneurysms which happen in the Arm-pits, the Groins, or the  
\* Neck, or in other Places, if they are of a remarkable Bigness,  
are not attempted by the Surgeons, because of the Largeness of  
the Vessels; but those in the extreme Parts, the Joints, or the  
Head, are treated aS follows *t*

If the Tumour proceeds from a *Dilatation* of the Artery, we  
make a direct incision lengthwise ; then taking hold of the Lips  
of the Wound with Hooks, we separate the Artery, by theHelp  
of proper Instruments, from the Skin and Membranes, laying it  
\* bare ; then passing a Needle under it, we make a Ligature with  
two Threads : After this we prick the intermediate Part of the  
Artery with the Incision-knife, evacuate its Contents, and en-  
deavour a Suppuration till the Threads sail off

When the Aneurysm is caused by a Rupture, we take entire  
Hold of it, as far as may be done, together with the Skin, with '  
. our Fingers ; then pass under it a Needle with a double Thread,  
and, after it is pass'd, cut the Loop, by which means we have  
two Threads, in order to make a Ligature on each Side the  
- Tumour. If we are apprehensive, that the Threads should flip,  
we may pass another Needle, exactly by the same Perforation,  
- threaded also with a double Thread ; which being cut like the  
.. former, you may heve four Ligatures upon the Tumour; then  
- opening the Tumour in the Middle, we take away the Contents  
. by the Aperture, of the Skin, leaving the Ligature ; then wo  
. apply a Compress moisten'd with Wine and Oil, and prosecute

the Cure with Lint. Ρ. *AEgineta, Lib.* 6. *Cap. Tsp.*

*e* Dr. *Frgrind* takes Occasion, from the Doctrine of *Paulus,*- with respect to an Aneurysm, to make the following Observa-

tions on this Subject :

. An Aneurysm by *Galen,* and we see here by *Paulus,* is de-  
. scribed to be a Tumour, which rises from arterial Blood extra-  
vasated ; and that it proceeded from a Rupture in the Coats of  
the Arteries, was the constant Opinion of all the *Greek* and  
*Arabian* Writerin *Fernelius* was the first, who asserted, that  
the Artery was only dilated, but not burst, in an Aneurysm :

. And *Vis.alius* seems to be of the same Opinion; *sor Adolphus  
. Occo* gives us the Relation of a Patient he had the Care of, in

Conjunction with *Achilles Graesserus.* The Case was a Tumour  
. in the Back, and that excellent Anatomist being call'd in, soon  
discover'd whet it was by the Pulsation, and pronounced it an  
Aneurysm arising from a Dilatation of the great Artery ; and,  
at the same time, he said, that the Blond was contain'd within  
. the Coats of it, as 'tis in those of a Vein in a Varix ; that he  
had found in these Swellings sometimes an Humour, concreted  
. like Ice, or Crystal, sometimes like Suet, and sometimes Blood,  
. grumous like a Mola. Upon Dissection, the Cavity os the

Aorta was found vastly distended, and much clotted Blond in  
it, as *Visulius* had foretold, which gain'd him a great Reputa-  
tion. That .the Arteries are capable of Distention, we find  
. often in Persons who are poison'd, and in some morbid Cases.

’Tis a remarkable Instance which *Vidus Vidius* relates, and owns  
. it to he a rare one, of a prodigious Intumescency in all the Ar-  
teries of the Head, quite round, so as to resemble large Varices.

. He adds, that *Fallopius* having undertaken to open it, just aS he  
was going to attempt the Operation, being discouraged by the

. Bigness of the Tumour, alter’d his Opinion, and would not  
. proceed: But such a Distention .as this, which spreads itself  
equally through so many Branches, would scarce,. I believe, be

. call'd an Aneurysm, which is a Tumour of a quite different Na-  
\_ sure, and more circumscrib'd.

*Sennertus,* refining upon the Notion of *Fernelius,* and not  
satisfied with a bare Dilatation, makes the Nature os all Aneu-  
rysms to consist in a Rupture of the Muscular, or inner Coat of  
. the Artery, while the outer, in the mean while, remains un-  
broken. It seems to me very plain, that he borrows this Doc-  
trine, tho' he mentions nothing of it, from *Hildanus,* who, in  
express Words, said the very same thing before him. The Cafe  
*. Hildanus* describes is that of an Aneuryfin, succeeding upon a  
Puncture ; and in that Case it may possibly happen, as he con-  
lectures, that the outer Coat may upon Compression unite,  
being compos d os membranous and very glutinous Parts, as is  
.evident from all Glue heing extracted from fuch . hutthe Fibres of the inner Coats, being muscular, wndn they are

once broken, must of course contract and shrink up, and, by  
starting from one another, he more difficultly brought to a Re-  
union : And I can scarce think it well conceivable, that any  
other Aneurysm can he form'd in this manner, than that only,  
and that not always, which comes upon a Puncture ; for it does  
not seem probable, that, when the Couse is intrinsical, a Force  
which is supposed able to burst the inner Coat, should find any  
Resistance from the outer, winch is own'd to he at least five  
times weaker. But, however, the Notion we have mention'd,  
though scarce so much as plausible, was embraced by */Pillis,  
Barbette,* and others, and became the fashionable Definition os  
an Aneurysm for many Years. And, indeed, smce the Opinion  
of the Blood heing not extravasated was first started, it may he  
observed, that all the Writers os Bedies either of Physic or Ana-  
tomy, heve run into this Hypothesis, without knowing much  
of the Subject they writ upon, or indeed of what they writ upon  
the Subject. To give an Example: *Forestus* contends Vehe-  
mentiy, that all Aneurysms come from a Dilatation of the Ar-  
tery ; and yet, in the Very Instance, which is the only one in  
his Works he gives us of an Aneurysm, the Tumour came from  
a Rupture, and the Blood was extravasated. And *Diemerbroek,*in Complaisance to the Doctrine then in Fashion, defines an  
Aneurysm, in Opposition to Mr. *Regi,* who was sor a Rupture  
in the Artery : Then he telis a Story of an Aneurysm, where  
there was a Rupture; but at last judinioufly concludes, that  
'twas no Aneurysm at all, for no other Reason but hecause there  
was a Rupture, and *so* consequently did not come within his  
Definition. . . .

The chief Arguments which the AstertorS of Dilatation urge,  
and which those who acknowledge a Rupture in the Artery are  
at a Loss to answer, are only two: How comes it to pass, if  
the Blood be not confin'd within the Coats of the Vefleis, that  
. there is a Pulsationin an Aneurysm ? How is it, that the Blood,  
ifextravasated, does not turn to Pus? As to Pulsation, it may,  
I presume, he easily conceived, how the constant Impulse of  
' the Blond of the Arteries may communicate a Motion to that  
which lies contiguous to it, though extravasated. The Force  
of Percussion is Vastly great ; and we find, by Experiment, in  
a Bladder full of Air, the least fresh Impulse from a Syringe will  
move all that is contain'd in it, and distend its Sides. If the  
Artery is large, if it lies superficial, and near the Centre of the  
Tumour, and is the Aneurysm be not diffused too much length-  
ways, the Pulsation will be strong, the' the Coat of the Artery  
' he burst; and this may he proved not only from Reason, but  
from Matter of Fact We have a Case in *Severinus,* where,  
upon a Wound in the great Artery of the Thigh, there was an  
Effusion of six Pounds of Blond in the Interstices of the Musi-  
cles; there was so Violent a Pulsation in the Swelling, as to lift  
up heth one's Hands, when laid upon it. When theAneurysm  
’ lies deep among the Muscles, Very often the Pulsation is not  
sensible. We may add to this, that it may grow more obscure,  
and at last he utterly extinguish'd, as the Coagulation of the  
Blood increases; and of this we have Instances, heth in *Severi-  
nus* and Mr. *Littre,* where the Pulsation was Very Violent at  
first, and afterwards entirely Vanish'd; and, therefore, we must  
not look upon this as a constant Concomitant in the present  
' Case. ~ Indeed, in most Swellings, we ought rather to argue  
- negatively; and if we are not sure of Pus, we ought always to  
he suspicious of an Aneurysm ; and, for want of this prudent  
Fear, some have mistaken,, and fatally cut it for an Abscess.  
Whet has been said of Pulsation, may let us into the Solution  
of the second Objection ; for if we can conceive how there  
can he a Motion communicated to the Tumour, we may natu-  
rally and. easily comprehend, how the same Motion may pre-  
serve the Blood from-Putrefaction, as well as if it were con-  
tain'd in the Coats of the Artery, inlarged by Distention only.  
\* A Very little Degree of Impulse will serve to hinder a large Mass  
*os* any Fluid from an entire Stagnation. Accordingly, in an  
Ecchymosis, the extravasated Blood, we see. Very often never  
suppurates *i or,* when it does, there is some Part of it found  
turn'd to a red Coagulum, distinct and separate from the rest,  
without any Mixture os Pus. The Very Case we have already  
mention'd in *Severinus,* comes up to the Purpose; where, aster  
the Tumour had been growing forty Days, there were taken  
out os it six Pounds of pure Blond, extravasated between the  
Interstices of the Muscles, and it had no sort of Tendency to  
Pus. Besides, I believe, the Very Position which these Writers  
lay down, that all extravasated Blood turns to Pus, may be  
justly question'd: Whet Quality 'tis in the Blood, or what  
Particles they are which dispose it to Suppuration, is a Problem,  
I confess, difficult to be solved ; but, sure I am, there is some-  
thing in arterial Bleed which often hinders it from heing chang'd  
into PuS, though extravasated.

Thus we see, how insufficient these Arguments made use of  
are to overthrow the Opinion os the Antients ; and we shall.  
. find, that Experience itself, from Dissections in these Cases,  
generally decides the Controversy in their Favour. For, to  
return to the Very Cose, where we mentioned *Vis.alius* before,  
- (which indeed is the first History of an Aneurysm dissected, that  
**. we** meet with) hesideS a Dilatation of the Artery, there was a

large Riroturc, as *Achilles Grajsierus,* one of the Physicians eon-  
Sem'd, gives us an Account. *Saporta,* who was contempo-

rary with *Ferneiius,* and seems to have him in his Eye, tho' he  
docs not mention his Name, relates three Cases, with all the  
Particulars, where the Artery was burst. The first is singled  
.Out, and repeated at length, by *Sennertus,* who pronounces it to  
he no Aneurysm . Though I can't imagine why he chose this  
Case to object against, when, os all the three, 'twas the most  
.distinct, and least liable to Objection ; sor, upon Diisection, a  
great deal *os* pure Blood was taken out, and the Artery dilated  
and burst ; and, while the Patient was alive, the Tumour had  
a great Pulsation, and receded upon Pressure ; and if this be not  
a true Aneurysm, I can't tell whet Words can be sound out to  
describe one. *Bartholine* gives us the History os several Aneu-  
rysms dissected, particularly os one at *Naples,* which he has  
made the Subject os a Book, writ indeed in a romantic Style,  
but where the Fact is clearly enough delivered. This was in  
.the Arm, and happen'd from a Puncture ; the Arm was cut  
.off, but the Patient died: The axillary Artery was vastly di-  
lated up to the Arm-pit; it was whole, only where the Puncture  
.had been made ; on the other Side, all the Coats were burst,  
.and the Branches which came from it could not be traced ; as it  
lay fuperfirial, there was grumous Blood lying along all the  
Tract of the Muscles. *Van Horne,* in his Epistle, which is  
printed with this Treatise of *Bartholine,* has another Very re-  
.markable Case: Because the Instance may suggest to us several  
practical Reflections, give me Leave just, in short, to relate the  
Particulars. This was a Tumour in the Calf of the Leg ; *An-  
ionites Vacca* pronounced it an Aneurysm; .others were os a dif-  
ferent Opinion, and, out-voting him, prevail'd, and treated it  
.for an Abscess: This Method made the Swelling extend itsels  
Io the very Toes, and there occasioned a Gangrene, so that  
.they were forced to cut off the Foot above the Ancle, sor sear  
.the Mortification should spread up to the Thigh: The third.  
Day after, they attempted to open, the Tumour, and the Patient  
shed in the Middle os the Operation. Tho' the Artery was  
dilated, so as to be six times bigger than natural, the Side  
towards the Skin was eaten thro' and burst ; and between the  
.Gemelli was a Parenchyma of grumous Blood, Very solid, and  
near the Consistence os Flesh. Somewhat a like Cafe I was an  
Eye-witness to myself, with the Surgeons of St. *Bartholomeuses*.Hospital: The Person was old, and of an ill Constitution ; the  
Aneurism had been, by his own Account, twelve Years grow-

‘ ing, and *of* late it had increased extremely: It surrounded all  
the Cals, almost tip to the Knee ; and the Pulsation was Very  
strong, not only along the Skin, but upon the Muscles, in the  
thickest Part of the Calf. The Valves of the Veins (many of  
them) were so entirely broken, that there were Varices both  
above and below the Knee, of a prodigious Bigness, which  
nevertheless fubsided upon holding up the Leg. Upon Ampu-  
tation, notwithstanding the Ligatures were strong, and the Ope-  
ration perform'd with great Dispatch, there was discharged from  
the Vessels above a Pint of Blood, the Diameters os the Arteries  
arid Veins were so greatiy inlarged. In the Aneurysm, upon  
Dissection, were sound, besides fluid Blood, two or three Pounds  
of Thrombi, winch lay like so many Plates upon one another:  
The whole Tract of the Crural Artery was greatiy dilated, and  
.the several littie Branches were broken off from the Trunk,  
not above a Quarter of an Inch from their Rise; and from these  
.the Blood was thrown into the Interstices of the Muscles, and  
the Gastrocnemii; neither was there any Communication at all  
front the Bottom. The Bones were so carious, that there was  
a great Hole in the This, and four Inches at least in the Fibula  
entirely wanting. This Circumstance of the Bones being cari-  
jous, often attends an Aneurysm : *Ruys.ch* haS two Cases, where  
all the true Ribs, and the Sternum, were almost consum'd, and  
the littie which remain'd was all rotten .. And we may easily  
conceive, how such a Tumour, by a constant Pressure, may  
affect the Periosteum, and cause an Obstruction there, and by  
that means gradually waste the Bone itself. We may learn an-  
other thing too from this Circumstance, that, fince so solid a  
Substance as the Bone cannot resist the Pressure of an Aneurysm,  
the arterial Coats may be thought more likely to yield to its  
Force, and heve their Fibres destroy'd by it. *. Lancisi* gives us  
the History os an Aneurysm in the ascending Trunk os the  
Aorta, where the Patient, who had some time before com-  
plain'd of a Palpitation, Fainting, Pain, Streightness, and Beat-  
ing in the Thorax, died suddenly : The upper Part of the Ster-  
num was press'd a littie outward on one Side. Upon Dissection,  
in the whole Curvature os the Aorta, was sound a Substance  
like Lard, inclosed in a Cystis; there was a Hole into the very  
Pericardium, in which accordingly were sound two Pounds of  
Blood. He is of Opinion, that all Aneurysms come from a  
Dilatation of the Artery ; and so, Very probably, at first most  
of them do: Yet, in the present Instance, he speaks of the  
Fibres being corroded, and from thence accounts sor the Dilo-  
rication, as he calls it, of them, in which the true Nature of  
an Aneurysm (he says) consists ; that is, in *English,* I think, in  
an unripping or tearing of the arterial Coats. A Case, exactly  
like this, we find in *Laurentius* os *Guicciardin,* where not only

the Cava and its Valves were all burst, but the Orifice of the  
Aorta inlarged to the Bigness of one's Arm. So it was, in a  
like Case, related by *Pare,* where tho inner Coat of the Ar-  
tery, tho' ossified, yet at the same time was burst. Certain it  
is, the Aorta, hefore its bending, is easier dilated, upon the  
Account of the Resistance the Blood meets with froth the Cur-  
vature there ; and, for this Reason, Aneurysms ostenest happen  
in this Part os the Artery ; and one may easily conceive, that  
is they can consist in Dilatation only, it can no-where else so  
likely take Place as here.

Mr. *Littre* in the *French* Memoirs, gives a long and particu-  
lar Detail of two Aneurysms in this Place; where the Artery .  
was thrust out so, as to form a Sack, which reached up into  
the Thorax and Neck, and in one Case, erven along the Neck  
to the lower Jaw. *these Cases belawsp* In both these

Cases, at first the Persons complained os a Beating, which  
exactly answered that of the Arteries, and of an uneasy  
Struggling in the Thorax, attended\* at length with a great  
Oppression, a Difficulty of Breathing, and an universal  
Languor, some time before any thing was perceived outwardly  
above the Clavicles ; afterwards other Symptoms appeared, much  
like what I have observed myself in a parallel Cose, such as  
Pain, not only in the Chest, but in the Shoulders, the Arms,  
and the Head; in the last, often a Pulsation likewise ; very  
littie Sleep, and that often interrupted; and Inability often to  
lie down in Ped, and always a greater Ease in a leaning Posture  
forwards ; the Breathing sometimes so disturbed, aS to give  
Apprehensions of a sudden Suffocation. In the first of these  
Instances, some Part of the Ribs, the Sternum and the Clavi-  
cles were found carious. A Quack, by suppurating Medicines,  
had made some Part of it burst, upon which followed a Gan-  
grene, and, in three Davs, Death. Each of these Aneurysms,  
he says, was only a Dilatation of the Artery: But, I must  
confess, though his Description be Very minute and exact, I  
have still some Semples upon me, and am not perfectly satisfied,  
that in this Case there was a mere Dilatation alone of the arte-  
rial Coats. For, hesides that he says himself, there was not  
only a firm Adhesion every-where or this Aneurysmal Pouch to  
.the Ribs, the Sternum, the Clavicles, and the Muscles, but a  
Corrosion of its Membranes in all those Places, where it ad-.  
hered; these Membranes, which he attributes to his Pouch,  
might he Portions of the *Mediastinum,* and the *Pleura,* or Ex-’  
pansions of those belonging to the Muscles. But yet further,  
it may not he absurd, is, in Answer to this, we should affirm,  
that Humours extravasated may form a particular Membrane to  
themselves, which is no Part os the Vessels, from whence those  
Humours are discharged. What we observe every Day of an  
Hernia Carnosa, and Wens, consisting of a vast Number os  
Cystis'S, each of which has its particular Membrane, and is  
filled often with a different sort of Substance, may give so  
much Countenance to this Opinion, that we may at least think  
it worth considering, before we determine any thing in this  
Point. The Account *Ruys.ch* gives of an Aneurysm in the  
Thorax, which filled the whole Cavity of it, without any  
outward Swelling, seems to answer this Idea: For it consisted,  
he says, of innumerable thick Coats, which lay like so many ..  
Plates one over another, between which was inclosed a great deal  
of coagulated Blond. Thus the Blood lay like Leaves one upon  
another, so as to form a sort of Polypus, in the Case recited  
by Mr. *Littre:* This is certain, that we may find Examples  
os this Kind in *Sevcrinus, Marchetti,* and others. Our Coun-  
tryman *IViseman* telis us, that he always found both Coats of  
the Artery open, in short, as Matter of Fact is the best Ar-  
gument, I can't but observe, that among all the Accounts Ana-  
tomists give us of the Dissection of an Aneurysm, there is  
scarce an Instance upon Record, of a large one, at least,  
where there was not a Rupture in the Artery, according to  
the Doctrine of *Paulus.* What has been said will, I helieve, be  
sufficient to shew, how ill sounded is chat Division, which  
some Modems have made of Aneurysms, into true and spuri-  
ous ; whereas the whole Difference lies only in the Form of a  
Tumour. And if you consider what they heve advanced upon  
this Head, you will find that, as this Distinction is generally  
wrong in Theory, it signifies still less in point of Practice.  
*FrtinPs Hist, of Physic.*

*I have inserted* the preceding Dissertation, because there are  
many curious Passages in it, which should not be omitted in a  
Treatise on an Aneurysm. But in Justice to the Reader I  
must remark, that Dr. *Frtind* has absolutely mistaken the Pas-  
sage in *Paulus;* for this last Author plainly distinguishes betwixt  
an Aneurysm by Dilatation, and one by the Rupture of the  
Artery, in describing the Operation. His Words are εἰ μὲν  
κατ' άνευρισμὸν o όγκος ἐγένετο. *Cornarius,* the Interpreter of  
*Paulus,* tranflates this. *Si ex Apertione Tumor factus est,* but  
how erroneoufly, the learned Reader will readily see. I am  
sensible, that, a littie hefore, *Paulus* seems to make a Distin-  
ction hetwixt an Aneurysm δι' ανὰστόμωσιν άρτερίας, and one  
κατὰ ῥέξιν. But as no such thing as an *Anastomosis* can be  
meant here, in the Sense it is generally used in by the *Greek*Writers; and as he seems to explain it afterwards by άνευρισμὸν.

when he speaks of the Operation, I am inclined to think he  
means by Anastomosis a Dilatation of the Artery..

I must not omit here a Remark os some Importance to Stu-  
dents in Physic, with respect to the *Latin* Tranfiations of the  
*Greek* medicinal Authors . It is that they are so little to be de-  
pended on, that it is very dangerous to quote a Passage on their  
Authority. I have frequently been milled by their Inaccuracy,  
when I had no Opportunity of consulting the Originals, being  
at a Distance from Libraries ; and I will not be answerable that  
I have corrected all the Mistakes they' have led me into.

' The following Histories of Aneurysms will set their Nature  
and Origins in a true Point of Light, and prove evidently, that  
1 the Distinction os Aneurysms into *true* and *spurious,* is not  
without Foundation.

**HISTORY I.** *By Mr.* **LITTRE.**

A Klan of fifty-six Years os Age, who had always enjoyed a  
goed State of Health, sent sor me the tenth os *July* last.

I sound him by the Firs, in an Elbow-chain, to which he  
had been confined sour Months; sor he could not keep in Bed,  
nor walk, because he was almost choaked so soon aS he lay  
down, and could not walk without being in Danger os feinting.

He told me, that he slept very littie, that his Sleep was un-  
sound, and interrupted, that he was grown very lean and  
weak, and sometimes fainted, even in his Elbow-chair, althe’  
he took nutritive Food, and in sufficient Quantities; that his  
Respiration was difficult; that he could not turn nor bend his  
Neck and Head, without great Pain; that for five Months he  
had a Tumour upon his Neck, which increased by Degrees,  
althe’ now-and-then it diminished very sensibly; but that this  
Diminution did not continue long, the Tumour quickly  
returning to its former Bulk ; that it was painful, but especially  
in the inferior Part, and accompany'd with a continual Pul-  
sation, which for a Month past had been gradually decreasing.

I felt his Pulse, which I sound weak; and upon examining  
'the Tumour, found a Part of it on the Neck, and a Part of it  
upon the Breast. This Tumour was soft, and yielded to the  
Pressure os the Fingers, but recovered its former Shape, so soon  
as! sorbore prefling it. I felt a small Pulsation in it, which ex-  
actly agreed with that of the Arteries ; the Colour os the Skin  
that covered it was natural. All thefe Circumstances made me  
conclude, that this Tumour was a real Aneurysm, formed by  
the extraordinary Dilatation of seine Artery.

. I ashed the Patient, is he had received any Blow upon the  
Neck or Breast, or if he had strain'd himself in Coughing,  
Sneezing, or Vomiting, *etc.* He answered, that he was con-  
scious of having received no Blows, but that sor five Days suc-  
cessively he had used great and almost continual Efforts to vomit,  
and go to stool, which he said were the fatal effects os Pilis a  
Quack had given him to cure him os a Rheumatism ; that three  
Weeks aster he began to seel, towards the Middle of his Breast,  
a Beating he had not before felt ; that six Weeks after a Diffi-  
culty os Respiration succeeded this Beating; and that the Dissi-  
culty os Respiration three Months aster was followed by a Swel-  
ling on the Neck ; that the Beating, and Difficulty os Respira-  
tion, had always insensibly increased, till this Tumour appeared;  
upon which he no more selt the Beating at his Breast, hut he-  
gan to perceive another Beating in that Part os the Neck where  
the Tumour was, and that the Difficulty of Respiration did no  
more increase, but continue the same.

I advised the Patient to take littie Food, or what was not  
very nourishing, or to let Blood now-and-then, is he took a  
goed deal os Nourishment. I also advised him to put a Bandage  
upon the Tiunour, not with a View to compress it, but only  
to support the Integuments, that by being rendered more capa-  
ble os resisting the Impulse of the Blood, they might in some  
measure prevent the Increase of the Tumour. %

The Patient having sent sor me again fifteen Days after my  
first Visit, told me, that his Paintings were more Violent and  
frequent. I sound him much weaker, and the Tumour larger ;  
there was no more Pulsation; but about three inches os the  
Skin towards the Right Armpit was become livid. In the.  
Middle of the discolour’d Place there were two Holes almost  
imperceptible, whence now-and-then proceeded some Drops of  
Blood. These new Symptoms were probably occasioned by  
acrid Medicines, which another Quack had apply'd to the Tu-  
mour to make it resolve or suppurate, who doubtiess knew not  
the Nature of the Distemper, or was ignorant that real Aneu-  
rysms are not cured by resolutive nor suppurative Medicines.

Two Days aster, a dry Gangrene in the discoloured Part of  
the Tumour ensued, three Days after which the Patient died.  
I laid open his Body, which was so lean, thet scarce any thing  
remained but Skin and Bones. I observed nothing extraordi-  
nary in the Parts contained in the Cavity of the Abdomen, nor  
in that os the Cranium, except that there was but littie Blond  
in their Vesseis, as also in those of the Face and Extremities.

Before I laid open the Breast with an incision-knife, I dis-  
engaged these teguments which covered the Tumour, except  
in the’gangren’d Part, .where I lest them; for it was impossible,  
to disengage them from It, without cutting or tearing a Part of

the Tumour, so firm was their Adherence to one another. I  
afterwards separated the Tumour from the Neck, from the  
Clavicles, and from the exterior Parts of the Breast; but it ad-  
her'd very strongly in those Places that touch'd upon the Ribs,  
the Sternum, and the Clavicles, where it was corroded, and  
the Bones hecome carious ; the rest os the Tumour adher'd but  
little. The soft Parts situated upon the Breast under the Tu-  
mour were full of a serous Humour of a yellow Colour.

I then raised the Stemum with a Pan of the Ribs, and **the**Clavicles that are join'd thereto on both Sides, that I might  
examine with more Freedom the Parts contain'd in the Cavity  
of the Breast, and extirpate the Tumour whole.

I observed, first, Thet the Lungs were dry, wither'd, and  
collaps'd; and that the Trunk and Branches of the Blood-vessels  
retained their natural Shapes.

Secondly, That there was a Spoonful and an half of Serum in  
the Pericardium, and no Fat about the Heart.

Thirdly, That **the** Trunk os the Aorta, from nine **Lines**Breadth above the Heart to the Place where it takes the Name  
os Aorta descendens, had its Coats much thinner, and was very  
much dilated, so that almost all the Dilatation was made in the  
superior and anterior Parts; and the three Branches which com-  
pose the Aorta ascendens, and which commonly rise from **the**Middle and Upper-part os the Trunk os the Aorta, were placed  
in the posterior Part os this Trunk.

Fourthly, That the dilated Part of the Trunk of the Aorta  
extended itself aS sar aS the Under-jaw, cover'd the Forepart,  
and the Sides of the Neck fell back upon all the upper and ante-  
rior Part os the Breast, from one Armpit to the other, and  
form'd a CVstiS not unlike a Bottle, the Neck of which was  
within the Breast, and Bottom without. This Cystis was nine  
Inches and- an half long from the Trunk os the Aorta to **the**Under-yaw; it was two Inches broad at its Origin, and three  
at its Egress out of the Breast. Its Diameter upon the Neck  
was hetwixt nine and ten Inches, and thirteen upon the Breast.  
Upon the Whole, this Cystis was half a Foot in Depth at the  
Neck, and seven Inches and an half on the Breast.

Fifthly, The Thickness os the Sides of this Cystis was so dif-  
ferent in different Parts, that it varied in all the intermediate  
Degrees hetween the fifth Part os a Line, and ten I ines. Both  
the thickest and the thinnest Tarts were without the Breast;  
the thinnest lay chiefly in the gangren'd Parr, and the thickest  
in the Part situated upon the Breast.

Within this Pouch there was about two Pints of Blood, of  
which one third was black, coagulated, and Very strongly ad-  
hering to its inner Surface; the other third was os a reddish-  
brown Colour, and half coagulated ; the remaining third was  
liquid; and had almost its natural Colour and Consistence.

Lastly, The internal Surface of the Cystis os the Trunk of  
the Aorta was smooth and even in some Places, and rough in  
others. This Smoothness of the Surface was natural, and was  
owing to the internal Coat of the Cystis heing kept entire. The  
Unevenness os the same Surface was unnatural, and depended  
upon two Causes, the erosion of a Part of the proper Coats of  
the Pouch, and the Adherence of certain Fibres, which dif-  
sor'd not from these of a Polypus of the Heart, but in this, that  
they were larger, plainer, firmer, and more red. These Fibres  
composed several Laminae, that were easily separated from one  
.another. ’ ......

Having now given some Account of this Man'S Distemper  
enumerated, with the several Symptoms that attended it, and  
declar'd what I found extraordinary in his Body, I shall endea-  
vour to assign the Cause os the Distemper itself, and account for  
the most material os its concomitant Symptoms; - '

The Pilis which this Man had taken, heing composed of Very  
violent Purgatives, aS one may readily suppose from the Excess  
os their Operation, probably gave Occasion to the extraordinary  
Dilatation of the Trunk of the Aorta. My Reasons for think:,  
ing so are these : First, In the Efforts the Pills produced in him  
to Vomit and go to stool, the Diaphragm, being Violently coni  
tracted, compress’d the Aorta descendens strongly, and almost  
intercepted the Passage of the Blood to it ; then the Blood sent  
from the Heart to the Trunk of the *Aorta,* finding only the  
Branches of the *Aorta descendens* open, but uncapable to receive  
it, must of Necessity do Violence to these Branches, in order to  
force itself a Passage. Now is the Sides of the Trunk were  
thinner in Proportion, or os a less close Texture than the  
Branches, the Trunk must of Consequence have heen dilated,  
and not the Branches ; and this Dilatation must have been only  
in the weakest Parts os the Trunk, thet is, in its Middle and  
Lest anterior Parts, aS has been already observed. These two  
Parts being once stretch'd by the Impulse, and the extraordinary  
Quantity os Blood, could no longer resistjt, althe'it was only  
impelled to them with its ordinary Momentum, and in its ordi-  
nary Quantity; consequently they must afterwards yield, and  
he more and more dilated.

The Efforts also occasioned by these Pilis might excite a great.  
Agitation in the animal Spirits, determine them to stow into **the**Heart in greater Quantity, and with greater Velocity than ordi-  
nary, and thus render its Contractions more strong and **fre-\***

quent; το that it must of Consequence have thrown more  
Blood, and that with a greater Impetus, into the Trunk of the  
Aorta; forc'd its Sides to dilate themselVes to receive it, and  
thereby heve laid a Foundation for the extraordinary Dilatation  
os this ArtCry. ;

The posterior Part of the Trunk of the Aorta scarcely suf-  
ser'd any Dilatation, hecause it was thicker, and of a more  
compact Texture : But aS the Trunk was dilated towards its  
superior Part, the three Branches, which compose tho Aorta  
Ascendens, must of Necessity have been situated in the poste-  
- rior Part. ...

The Sides of the Cystis of the Aorta were *very* thin in some  
Places, and very thick in others. Two Reasons may be assign'd  
why the Parts were thin : I. Becaose they consisted of nothing  
but the simple Coats of the Artery. .2. Because of the vast  
Dilatation which these Coats had suffer'd, by the Impulse of  
the Blood, and by its Coacervation in the Cavity of the CystiS.  
The Sides of the Cystis were thick in the Places where the po-  
lypous Fibres were fastened to its inner Surface, and the Thicks.  
ness was greater or less, just as there were more or fewer of  
these Fibres, laid upon one another.: These Fibres, and even  
those of the Polypus, must heve been formed by the Slowness  
of the Bloed'S Motion, by the Grostness and Viscosity of its  
Paris, and by their Surfaces coming into a great many Points  
of Contact. ' . . .

- The Slowness of the Blood's Motion might heve also occa-  
sion’d its being pent up^ in tho Cystis, and its Coagulation  
there ; Hence also the weak Pulsations, and the Separation of  
fonte Part of its Serum. The Motion os the Blood was flow  
in the CystiS, because becoming gradually larger and larger, and  
its Bottom being imperforate, the Blood mutt come out at the  
same Place where it went in. Now the Blond which had  
- heen driven into the Cystis by one Contraction of the Heart,  
was hinder’d from coming out by that which the next Con-  
traction sent to it.

As soon as the Tumor appeared on the Patient’s Neck, he  
felt a Pulsation there ; hut felt it .no more in his Breast, be-  
cause the Impulse os the Blood, which was the Cause of the  
Pulsation, made a much greater effort against the Bottom of  
**the** 'Cystis, that form'd the Tumor, than against the other  
Parts, and because this Bottom was then out of the Cavity of  
the Breast. The Pulsation by Degrees diminished in the Tu-  
mor, in proportion as the Blood coagulated in the Cystis, as  
more polypous Fibres were formed, arid as the Contractions of  
the Part became weaker. - ss T ... .. ... .-

The Difficulty of Respiration increased no more after **the**Tumor of the Neck appeared, hecause the Impulse of **the**Blood heing chiefly in a rectilinear Direction, the Cystis of **the**Aorta only increased in Length within the Breast. Thus, when  
it reach'd the Neck, it increas'd no more in the.Breast, conse-  
quently the Difficulty os Respiration continued the same.

The Patient was in Danger of Suffocation when he lay down-  
**I.** Because in this Situation, the Blond driven by the Heart  
into the Trunk, os the Aorta, flowing more easily into the  
Cystis of this Artery, than in a vertisol Situation, it cosse-  
quentiy received a greater Quantity of it on this Occasion.  
2. Because the Blood contained in that Part of the Cystis, situ-  
ated externally upon the Breast, sell then into that Part of the  
Cystis within the Breast, and from thence a Part of it fell into  
theTrunk *of* the Aorta. Lastly, In the horizontal, or somewhat  
oblique Situation, the Blood contain'd in the Part *of* the CystiS,  
that, formed the Tumor of the Neck, had a greater Weight  
upon the Trachea, than in the Vertical Situation, and therefore  
compress'd it more. These three Causes must necessarily pro-  
duce the Danger of Suffocation in the Man, when he lay down.  
Towards the last Stage of the Distemper, the Tumor, now-  
and-then diminished, but soon after returned to its former Big-  
ness. The Tumor diminished now-and-then, I. By the. Con-  
finement and Coagulation of the Blood. 2. When the Heart  
drove little Blood into the Trunk of the Aorta, or that its  
Motion thither was flow and weak ; because then the Blood  
contained in the Tumor might with Ease Tall into the Trunk  
of the Aorta, and from thence pass into itS Branches. .

The Tumor might return to its former Bigness, I.. By **the**intestine Motion and Rarefaction of the Blond. 2. When some  
Clots of Bleed shut up its Passage from tho Tumor into **the**Trunk of the Aorta, in such a manner, that it allow'd fresh.  
Blood to enter, but suffer'd none to get out. The Sides of the  
CystiS of the Aorta were corroded in the Places where they  
touched the Ribs, the Sternum, and Clavicles ; and these  
Parts of the Bones were become carious;-hecause the Trunk  
of the Body of this Man heing always Vertical, a Part of the  
Blood contained in the Cavity of the Timor press'd with a  
greater Weight upon the Coats os the Pouch, and upon the  
Periosteum of these Bones, compressed them\* strongly, and  
stopp'd, or at least retarded, the Return of the Blood, , and *of* the.  
Lymph, into theirVeffeis; and thereby gave occasion to the Se-\_  
paration of a Part of the Serum. Now this Serum being always  
impregnated with Salts, which it distolved, and carry'd along  
with is, must have first stimulated and corroded the Coats of

the Cyshs, afterwards the Periosteum, and then the Bones.  
The Coats of the Cystis in these Places were sooner corroded  
than in others, because they, being supported there by Bones,  
were more press'd upon, resisted more, and consequently were  
more directly exposed to the Action of these. Salts. The soft  
Parts situated upon the Breast, below the Tumor, were filled  
with a great deal of Serum, which was exrrayafared by **the**Pressure of the Tumor on these Parts.

The Body of the Patient was Vastly extenuated, tho\* he  
used a nourishing Diet, and that in considerable Quantity, be-  
cause the Circulation being render'd very flow by the bad  
Disposition of the Trunk os the Aorta, the Parts of the Blood  
could neither he sussicientiy attenuated, nor propelled with  
Force enough into the Pores of the solid Parts, in order to  
furnish them withsa sufficient Quantity of Nourishment.

As for his great Weakness, and the fainting Fits that often  
seiz'd him, they might arise from the same Causes that the  
Leanness did ; besides this, they might have been caused by  
some Clots os Blond, which falling from the CystiS os the  
Aorta into its Trunk, might, in some measure, shut up some  
of its Branches. These continued till the Clots were dissolved  
and attenuated by a fresh Impulse of the Blood, and by the  
Construction of the Artery. *Mem. de st Acad. R.* I7O7.

HisToRY IL *By Mr.* LITTRE.

A Man of 44 Years of Age dying of an Aneurysm, I laid  
open his Body to examine the Particulars of this Distemper:.  
This was a true Aneurysm, that is, an extraordinary Dilatation  
of the Artery, -situated partiy upon the Neck, and partly in she.  
Breast, parallel to the Spina, and extending itself from the third  
superior Vertebra of the Back, to the fifth inferior of the  
Neck, and laid all along upon the Oesophagus ; its middle, and  
superior Parts lay upon the Trachea, and its middle inferior  
Part upon the Body of the Lungs themselves. It was four.  
Inches long, and above two Inches and a half broad : Where  
its Diameter was largest, its Thickness was unequal, heing  
thicker in its inferior Part, than in its superior ; and in its su-  
perior, than in its middle. It was round and oblong, plash  
and smooth, of a reddish-brown Colour, and so hard, that tho\*.  
I press'd it down Very much with my Finger, it yielded but  
little.. It adhered pretty close to the Fore-part of the Sternum,  
to the first Rib on each Side, and to the Skin, and behind to  
the Muscles which cover the Trachea Arteris ; and by its  
whole Basis it wasjoin'd to the superior Right Part of the Trunk  
Of the large Artery-, of which it was only an Extension and  
Production.

After I had examined the Situation of this Aneurysm, **I**separated it from every thing to which it was fixed, and laid in  
open. I made the following Observations :

I. Thet the Sides were Very dense, and os an unequal Thick-  
ness, being a quarter os a Line thick in the thinnest, and about  
a Line in the thickest Places ; so that in the last the Sides  
were littie less thick than in the rest os the Trunk.

2. That half of the Cavity of the Aneurysm was silled up  
with a sort of polypous Flesh, ranged in Laminae fixed to one  
another, the outermost to the internal Surface of the Tumor,  
so that they might have heen separated without breaking, if they  
had been gently handled.

3. That the same Surface of this Aneurysm was smooth in  
the Places where the polypous Flesh was not fixed; and that it -  
was uneven in the Places where it adher'd. It was probably  
the Inequality of this Surface that caused the Attachment of  
the polypous Flesh ; and the Inequality was the Effect os the  
Erosion of the Membrane, occasioned by some Salts separated  
from the Blood in the Cavity of the Aneurysm, by reason of **the**Stay it was obliged to make-there. ' -

. Lastly, The Sides of this Aneurysm formed internally two.  
Bodies of Strings ; the one was situated about the middle Part ;  
it was of a reddish Colour, one Line thick, and described only  
three quarters of the Circumference. The other String was  
placed in the inferior Part: It was of a whitish Colour:. It was'  
much harder than the other, two Lines thick, and went quite si  
round the Aneurysm.. At the Place where the two Strings,  
were, the Aneurysm was not so big as in the Places near it.'  
which made a sort of a Strangulation there. All the Trunk of  
the Aorta, unless where the Aneurysm was, had kept its for--  
mer tubular Form. It was grown bigger, and its Sides some-'  
what more dense, but the Thickness seemed natural.

. This Trunk, towards its Origin or Base, was two Inches  
and six lines in Circumference, six inches ten Lines towards  
its Middle, and two Inches six Lines towards itS Extremity.  
One might observe, in the Thickness of its internal Sides, small  
stony Laminae, of a whitish Colour, pretty brittle, of differ-;  
ent Bulks, and os different Thicknesses. The interior Surface,  
in the Places where there was none of these Laminae, had a  
great many Pores, from whence, when I pressed the Artery,  
a sort of Lymph came out, which was clear, and a little mnci--  
laginous. This Lymph might have imparted some Fluidity to  
the Blood, moisten'd the interior. Surface of the Artery, made

it smooth and slippery, and securloi it from the Action **of .the**Salts os the Blood!

The Right Axillary preserv'd its ordinary Bigness, and its ex-  
terror "Surface was everv-where finooth as usual. But the inte-  
rior, four Lines from its Beginning, was, for half an Inch,  
unequal; there the Sides were somewhat more dense, and twice  
aS thick as in the Parts near is, and tho Cavity narrower in **Pro-**portion. '

The Left Subclavian was also as hig aS usual, and itS exterior  
Surface equal; but the interior was unequal in its Beginning,  
for the Space of three Lines ; its Sides, in the same Extent,  
were somewhat more compact,\* three times thicker, and there  
the Cavity was proportion ably narrower. In the above-men-  
tinned Places, a saint Tincture *of* Yellow was observed in the  
Sides of these two Arteries. Lastly, the lest carotid Artery,  
and the Aorta descendens, were in their natural State.

The Heart was big; the Cavities of its Ventricles were  
large, but especially that of the Left ; their Sides also **were**somewhat thinner than usual.

’ The Lungs were full os a thick, blackish Blood : The Tra-  
chea, in the Place where the Aneurysm lay, was thicker,  
more compact, ’and not so round as in other Places ; and the  
Branches and the Vesicles os this Part contained in their Ca-  
vity a great deal of Humour, which was viscous, tenacious, and  
os a yellowish Colour.

**REFLECTIONS** *on the Circumstances above-mentioned.*

*First Reflection. Ps.* true Aneurysm heing only, *aS I* said,  
an extraordinary Dilatation of the Artery, one may affirm,  
that in the Trunk of the Aorta, the Man I speak of, had two  
true Aneurysms ; one particular, the other universal. The  
former, winch has been the Subject of my Observation, was  
only form'd os a Part of this Trunk; and what remain’d,  
sorm'd the other.

*- Second Reflection.* These two Aneurysms were produced by  
the same Causes : The Diminution of the Cavity of the Right  
Axillary, and the Left Suhelavian Arteries, was the occasional  
Cause of them, the Blood the instrumental, and the Heart the  
efficient.

i It is easy to comprehend, I. That the Blond, continually  
thrown from the Lest Ventricle of the Heart into the Trunk  
of the Aorta, finding no more, after the Diminution of **the**Cavity of these Arteries, the same Facility in its Distribution,  
must have struck with a greater Impetus upon the Sides of this  
Trunk, stretch'd them by Degrees, dilated them in an extraor-  
dinary Manner, and, at last, have form'd a total Aneurysm, if all  
their Parts had equally yielded to thisImpulse; but.a partial one,  
accompany'^ with a total, if some Of them were more distended  
than others, either because they were thinner, or of a Texture  
fess compact, or, perhaps, more exposed to the Impetus of the  
Blood. It is easy to comprehend, le. That the Circulation ofthe  
Blood, partly interrupted in the Sides of these same Arteries,  
might cause the Blood to coagulate there; this Interruption  
might heve been occasioned by the Sbriveling of the Fibres  
which, compose these Sides, and which may have been stimu-  
lated by some extravasated Salts ; or by **the** Elassicity of their  
respective Membranes and Vesseis heing weaken'd by the  
Blood which is continually driven thither by the Heart.

.Tn these Cases, the Blood, not having its free Course, or not  
being propell'd it) its ordinary Manner, must flop, and coagu-  
sate in the Cavities of these particular Vesteis, dilate them,  
separate their Fibres, inlarge, their Pores, give occasion to a  
greater Quantity of nutritive Juice to be discharged, to get  
between the several Laminae of the Membranes of the Sides,  
diffuse itself among their Fibres, separate and disjoin them,  
adhere firmly to them on all Hands, and consequently increase  
the Thickness of the Sides of these Arteries.

*Third Fsosuction.* The considerable Diminution of the Ca-  
Vities of these Arteries was the Effect of the extraordinary  
Thickness of their Sides, especially fince the Thickness was  
wholly form’d on the inner Side ; either hecause the Circu-  
lation had been only intercepted on this Side, or because **the**- external Laminae had more oppos'd their Separation than **the**internal. Thus the internal Sides incroached upon the Cavity,  
and diminished itin Proportion.-

*s Fourth Reflection.* It may possibly he ashed. Whether the  
extraordinary Thickness of the Sides of these Arteries was a  
Fault in their original Conformation ; or. Whether it was  
afterwards contracted by any particular Accident. The latter  
of these Opinions, to me, appears the more probable of the  
two, for the following Reasons :

” I. The Patient, some Days before his Death,, told me, that  
for about eight Months past, he. had felt in the Middle *os* his  
Breast ah extraordinary Heat, Palpitation, and Oppression,  
which had daily augmented from their very first Appearance.  
These three Symptoms may easily he accounted for, from the  
Description I have now given of the Aneurysm itself.

' 2. The Patient also assured me, that hefore that **Time he**herd never been sensible of the least Indisposition, or Disorder,  
’ in his Breast. \_ . ..

Moreover, the Texture of the Sides of the Arteries was  
irregular, and their internal Surface uneven. We have there-  
fore no Reason to believe, that this was a Fault of forty Years  
standing, (for so lung the Patient had liv'-d) or even of any con-  
siderable Numher of Years ; fince in Infants, and even in  
Adults, we can with Dissiculty chserve the *Callus of a Bone,  
which has been broken about a Year before.*

*Fisch Reflection.* The Membranes of the Trunk of the  
Aorta, winch in this Case, as one would imagine, must neces.  
farily he Very thin, by reason of the great Dilatation they had  
suffer'd, had nevertheless preserved their natural Thickness,  
probably, hecause in proportion as these Membranes were dila-  
ted, their Pores had proportionably opened and inlarged, and

' more nutritive Juice had insinuated itself into the Interstices of  
the Fibres, adher'd to their Surfaces, and increas'd the Thick-  
ness of the Membranes.

*Sixth Reflection.* The particular Aneurysm must have heen  
formed at that particular Part of the Aorta where I observ'd it,  
rather than any other, since all its Parts are supposed of an  
equal Thickness, and endow'd with an equal Power of Resist-  
ance ; and that so much the rather, because that Trunk of the  
Artery, which is nearly ofi.a semicircular Figure, does not be-  
gin to bend itself, till it reaches the Place where this Aneurysm  
was situated. Thus the Blood thrown out of the Heart must,  
os Consequence, have produced more considerable effects upon  
this particular Part, dilated it more, and brought on an Aneu-  
rysm in it.

*Seventh and last Reflection.* The particular Aneurysm must  
have been formed rather at the superior Part of the Aorta, than  
in the inferior and lateral Parts ; because the Blond, which  
was the instrumental Cause of it, is directed in its Motion,  
from below, upwards ; and consequentiy its Action must **heve**been greater on the superior, than any of the other Parts. This  
upper Part then must of course have been thrust upwards, in-  
sensibly dilated, and form'd into an Aneurysm, which would  
inlarge itself towards that particular Side.

*The principal Symptoms, with which this Aneurysm was accomr  
pans.d, accounted for.*

The Patient complain'd of a Weight and Pain in his Head,  
and os a Weakness of the principal Functions of his Mind.  
These three Symptoms were produced by one and the fame  
Cause, that is, the Compression of the Jugular Veins, occa-  
stoned by the Aneurysms.

The Cose stands thus : These Veins being compress'd, **the**Return of the Blood from the Brain to the Heart is not free  
and uninterrupted ; *so* that less Blond returning, the greater  
Quantity must consequentiy remain in the Head, and the Head  
itself of *course* must seem heavy : Because in such a Case there  
is too much Blond in the Brain, 'the Coats of its Blood-Veffeis,  
its Membranes, *etc. must os course he* stretched and Vellicated,  
and suffer a kind of Distortion and Dilaceration, in which the  
Pain consists.

The same Vesteis, so distended.with Blood, must compress the  
Nerves situated in their Interstices, deprive the animal Spirits  
of their free and easy Motions in the Brain, and consequently  
weaken the Functions and Operations of the Soul, winch de-  
pend upon these Very Motions.

The Patient felt also a Pain in his Neck, Shoulders, and  
Arms ; because the Aneurysm, being situated upon the Jugular  
as well as the Suhelavian Veins, by which the Blond returns **to**the Heart from these Parts, must compress them, render the  
Motion of the Blood thro' them flow and difficult, and eVen,  
in some measure, stop it in them. The Blond, thus lodg'd in  
the Veins, must distand and stretch them by its excessive Quan-  
tity, and stimulate and irritate them by the Salts which are  
secreted from the Blood, by reason of its Continuance there; and  
thus, by these two Means, the Pain in these Parts is excited.

He was likewise troubled with a Difficulty of Respiration  
and Deglutition, hecause the Aneurysm being situated upon the  
Trachea, and Oesophagus, which are, as it were, the Con-  
dints of Respiration and Deglutition, compress'd them so, that  
it was with Difficulty they performed their'respective Fun-  
ctions, especially about the Beginning of the Sternum, where,  
the Passage heing surrounded on all. Sides with bony Paris,  
whose Resistance cannot he surmounted, these two Conduits,  
cannot of course elude this Pressure.

The Pulfe of the Patient'S Right Wrist was small and weak,  
because, as I have observed, the Entrance of that arterial  
Branch, whence the particular Branch occasioning this Pulse  
sprung, being Very small, there must, of consequence, he little  
Blood convey'd into it, and that too must flow Very slowly  
in it, fince the Branch itself was too large and capacious, in  
proportion to the Blood carry'd thro' it. Thus that Blood  
could neither sill the Cavity os the arterial Branch, and there-  
by occasion a full Pulfe, nor dilate the Sides of it with Force  
and impetuosity enough to produce a strong one ; so that the  
Pulse, in hisRightWrist, must have been both small and weak.

The Pulse also of the Patient's Left Wrist was *so* small and  
weak, that it could scarcely be felt. We have already ch-

served, that the Entry of the arterial Branch, from which the  
.Branch producing this Pulse sprung, was much less than that  
in the Right Arm. The Artery where this Pulse is, must con-  
sequently receive much less Blood, its Sides he loss dilated,  
and with a proponionably. smaller Degree of Force, by which  
means the Beating of it was almost imperceptible.

Last of all, the Patient sainted, when, being weary'd of holding  
this Neck and Head upright, he let them fall to one Side.

When the Headinnd Neck are inclin'd forwards, the Jugular  
Veins form a kind of Bend, and are, as it were, choaked :  
When the Head and Neck, on the other hand, are reclin'd  
hackwards, these Veins are too much stretched, and the Dia-  
- -meters of their Cawties are diminish'd ; hecause their Sides  
must of consequence approach nearer to one another ; and when  
the Head and Neck are inclin’d , either to the Right, or Left  
Side, the Jugulars of the one Side are bended, whilst those  
of the other are too much stretch'd. - -

Now in all these Situations, the Jugular Veins are com-  
‘press'd, and their Cavities diminished ; and the Return of the  
Blood from the Brain to the Heart is by that very Means  
retarded and render'd more difficult. If to these Compressions  
we add that made upon the same Veins by the Aneurysm, we  
shall find no great Difficulty in comprehending, how the Veins  
of the Brain must be choaked up, and how these choak'd up  
Veins must compress the Nerves to such a Degree, that, in  
our present Case, a sufficient Quantity of animal Spirits could  
not be convey'd to the Hears, in order to carry on its Motion  
without Interruption. Now this Interruption of the Motion  
of the Heart is always followed, with Paintings, which are  
greater or less, according as the Interruption is shorter or  
longer. *Mem. dell Acad. R.* **I7I2.**

**' HISTORY** III.

On the 5th of *fane fan,* a Soldier came into the House  
of Invalids with an Aneurysm, almost of a Year's standing, on  
the anterior, right and upper Part of his Breast. The external  
Tumour, which was about a-Finger's Breadth distant from the  
Sternum, seem’d to be divided into two Parts, one of which  
possessed the intercostal Space between the second and third  
Cartilages of the Sternum ; and the other that between the  
third and fourth. , This Aneurysm rose several Lines above the  
Level of these Cartilages, alt ho3 they were sensibly more arch'd,  
and projected farther, than those of the Left Side, which was  
occasioned hy the quick and continual Beating of theAneurysm.  
They were even visible at some Distance ; and all the adjoining  
Parts were so sensible of Pain, that the Patient could scarce  
fuffer his Cloaths to touch them. He could not call to Mind  
any external Accident, which might be assign'd as the Cause  
of the Disorder ; however, he spun Ont his Life under, all the  
Agonies of his Disease, till the 22d of *Octobcr,* when Death  
put an End at once to his Life and his Pain.

Mr. *Morcmd,* the younger, laid his Body open, and sound  
the Aneurysm in the Aorta. But a Circumstance which appears  
somewhat miraculous, was, that the Aorta, already preterna-  
turally inlarg'd at the Place os its Egress from the Heart, about  
an Inch farther, form'd itself into a large Bag, thirteen Inches  
in Circumference, and capable of holding a Pint .of Water.  
Afterwards it contracted itself in order to continue its ordinary  
Course, send forth its four superior Branches, and form. Its  
Cross ; and at its upper and arterior Part, it was very closely  
united with that Part of the Pleura which covers the Cartilages  
of the Sternum.

Two Polypi sill'd the Cavity of the Aneurysm. The one  
began at the lower Part of the Aorta, cover'd the internal Sur-  
face of that Part os it which is next the Bate of the Heart, and  
afterwards form'd a kind of Plate, pierc'd with a Hole, parallel  
to the Opening of the Left Ventricle. The other Polypus co-  
vered the superior Part of the *Aorta,* which adher'd to the  
*Pleura.* They both - had this Circumstance peculiar to them,  
that the red Substance; of which they were composed, serv'd  
as a kind of Ground-work for a beautiful Contexture of small,  
white Filaments, which, by their Ramifications, intersected  
one another, and represented Various Figures, such aS Rays  
darting from a common Centre, Lozenges, Nets, and the  
nervous Ramifications observed on the Leaves of Trees. The  
red Substances were undoubtedly Concretions of Blood, form'd  
by its Congestion in the dilated Aorta. But if it should be  
ash'd, whet the white Filaments were ; I answer. They were  
probably the lymphatic and nutritive Parts of the Blood,,  
separated from the rest, by .its Stay in the Bag, and again  
united, as much as their Nature would admit of. If, on the  
other hand, it should be ashed, why these lymphatic and nu-  
tritive Parts of the Blond should rather unite themselves in Fi-  
laments, than in any other given Form ; I answer. That tho'  
we cannot account mechanically for this Phaenomenon, yet wo  
may reasonably suppose, that they are naturally disposed so to  
. do ; and that this Effect is Very agreeable to their Functions,  
and confinmed by the Formation of new Membranes, and  
Cystes, which are sound upon certain Occasions.

Mr. *Morcmd* observed how surprisinglv.fitilful Nature was,  
in finding out Expedients for her own Relies; and drawing,, as  
it were, from the Very Disorders into which the animal Ma-  
chine is thrown, the Means of preserving herself, or, at least,  
of warding off her Destruction. The Polypuses, as is usual,  
occasion’d a great Inequality in the Patient's Pulfe ; some-  
times an Intermittence, and at other times too great a Fre-  
quency ; but without these Inequalities in the Pulse, the Dis-  
order would have been still greater, since the dilated Aorta  
would have received a larger Quantity of Blood, than the Heart  
would heve been able to propel; the Polypuses, by filling the  
Cavity. of the Aneurysm, made amends for its excessive Dili-  
ration, and directed the Course of the Blood thro' a Canal  
which had all along heen kept open. In the two Polypuses  
also, a Part of one of which was pierced with a Hole, this  
Hole was parallel to the Opening of the last Ventricle, thro’  
which the Blood flows from the Heart. The upper Part of  
the Aneurysm adher'd to the Pleura, and, by its Union with it,  
had so fortisy'd the Membrane of the Aorta, as to prevent its  
breaking by the Action of the Blood, and save the Patient  
from an Effusion of Blood in the Cavity of his Breast, which  
would heve proved immediate Death. *Hist, de PAcad. R.*I72I.

**HISTORY** IV.

A certain Surgeon gave our Society an Account of a Very  
surprising and uncommon Case : A Man, as he informed us,  
who had gone a hunting, happening to turn his Head hastily,  
and with some Degree os Violence, to the Right Side, was not  
able, without a good deal of Pain, to return it to its natural  
Situation ; ever aster which Accident he was so much indispos'd,  
that he could neither swallow nor breathe without a Very great  
Difficulty. About fifteen Months after the Accident, the Pa-  
tient died; and upon searching sor the Cause of his Disorder, we  
found the Aorta Very much dilated, a large aneurysmal Cystis  
in the Right Subclavian, the Oesophagus andTrachea strongly  
compressed by this Cystis, the Clavicles removed out of their  
natural Situation, arid a Piece of Bone, which was wanting in.  
the Sternum, included in the Cystis. 'Tis no easy Matter to ac-  
count for the Bone's heing lodg’d in this Place. *Hist, de llAcad.*1700. . .

**HISTORY V.** *By Mr.* **MALoET.**

On the 26th of *June* last, in the Afternoon, a Soldier os 45  
Years of Age came into the Royal Hospital of Invalids, where  
I saw him the same Day ; and upon ashing him for what Dis-  
order he came there, he told me, that for fin Weeks past he  
had been troubled with a Defluxion in his Breast, for which he  
had been blooded six or seven times ; that ho had couglfd a  
great deal, and spit Blond, and'that his Cough, and a Pain in  
his Tbroat, were still remaining. I look'd at his Neck to see  
whether there was any Rising or Elevation about it, and found  
on the lower and anterior Part of it aTumour as large as a Nut,  
immediately above the Cavity of the Sternum, on which it  
rested : It was soft, round, and smooth. The Skin which  
Cover'd it retain'd its natural Colour. It had a Very perceptible,  
and a Very regular Pulsation, and yielded to the Pressure of  
one's Finger ; but restor’d itself to its former Dimensions Very  
?uickly, and with a kind of Force. From all these Symptoms  
easily concluded, that st was a true Aneurysm; and suspected  
it to he at the superior Part of the Aorta, which I imagin'd to  
be lengthen'd out independently os the Aneurysm. I ashed **the**Patient how long he had heen afflicted with that Tumour, and  
whether he was sensible of any Circumstance, which might  
have possibly laid a Foundation for it.

He told me, that he had only perceived it fince the De-  
fluxion in his Breast ; and that he could think of nothing to  
which he could so properly attribute it, as to the Efforts he had  
made in Coughing.

As his Cough remain'd as yet, I order'd him composing Me-  
dicines ; and because his Pulse was a littie too frequent, I re-  
duced him to Broths and Ptisans ; and order'd him to abstain  
from making any(Kinds of Efforts, because of the Aneurysm.

The Patient having continued under this Regimen till the  
29th of the same Month, he asked me one Morning, when I  
made him a Visit, if it was by my Orders that he had no  
Wine allow'd him : When I told him it was, he said, I cut his  
Throat, aS it were, by discharging him the Use of it: That as  
he had work'd at his Bufiness in the Quarries, he had been  
accustomed to it ; and therefore begg’d, that I would let him  
have some Allowance of it. ν Finding his Pulse calmer than it  
was on the Day in which he came to the Hospital, I made  
him be marked among the Nurnher of the Patients who were  
to have Wine.

I had no sooner reached the Bed next to the Patient's, than  
I heard behind the a Noise, as it were, of one vomiting. Upon  
returning, I found the Man, with whom I had just then part-  
ed, discharging Torrents of Blood from his Mouth. I ran to  
his Assistance, as did likewise the Apothecary of the Hospital,  
who attended me during my Visit. But as he cover'd not  
only himself, but every one that came near hem, with Bleed,

the first. Step we took, was with all Haste to provide a Vessel for  
receiving the Blood, which he discharged without any Effort,  
in great Quantities, which came up immediately upon the Back  
of one another. ' As I thought the Cape very desperate, I de-  
sired a Sister of the Infirmary to call a Priest with all possible  
Haste. The Patiens, having laid himself on his Bed, in the  
Posture which he judged most edvantageous, diseharged great  
Quantifies of Blood in the Vessel, which the Apothecary held  
for that Purpose, and expired in a Moment, before the Priest,  
who was in the Hospital at the very Time the Accident hep-  
pened, could heve an Opportunity of discharging the Functions  
of his Office, with regard to his Soul; sor there was fcarce a  
Minute betwixt his Death, and the Time of his heginning to  
"throw up the Blond, which was frothy, and of a vermillon  
Colour.

i Tho’ I expected very fatal Consequences from the above-  
. mentioned Tumour, yet, I must own, I did not imagine the  
Patient’s Death fo near at hand; and much lest did I suspecti  
that the Aneurysm should have been discharged by the Mouth.

But there was no Reason to doubt of its having hurst, and  
of the Patient’s having lost all his Blood by that Means, since  
upon his Death the Tumor of his Throat disappeared entire-  
ly.’ But how did it appear possible, that this Blood should have  
reached the Mouth, since nothing is more evident, than that  
the Tumor was a dilated Artery, none of which heve an im-  
mediate Communication with the Mouth, nor with any of these  
Canals by which this prodigious Quantity of Blood could he  
furnished r I saw plainly, that the Blood must heve forced a  
preternatural Road to itself;' but it could not have possibly dis-  
charged itself so suddenly without two Openings, one in **the**Artery, where the Aneurysm was, and the other in the Tra-  
chta, which I judged the ooly way by which rhe Blood could  
-reach the Mouth. This too appeared somewhat herd to con-  
ceive, since the Fluid contained in the Tumor did not seem  
capable of corroding the Sides of the Canals*., and even tho\**it had, it must have pierced the Sides of the Aorta, before it  
could produce any Effedl upon those os the Arteria Trachea;  
in which Case, that is, aster it has pierced this Artery, it must  
heve thrown itfels into the Cavity of the Breast, and by that  
.very Circumstance become incapable oscorroding the Trachea,  
or coming through it to the Mouth.

Upon faying the Patient’s Body , open, my Difficulties were  
removed. This I did the very Night on which be died, and,  
hefore I began the Work, I observed a kind of bloody Froth  
flowing from his Mouth, and the smallest Remains of the Tu-  
mour on his Neck were not to be seen. I opened the Breast,  
and aster having disengaged the great Artery, and its three large  
Branches, the Right Subclavian, the Left Carotid, and **the**Left Subclavian, I sound something peculiar and uncommon in  
the Aorta ; for it was dilated in the upper Part of its Arch,  
hetween the Right Subclavian, and the Left Carotid, betwixt  
which, just at their Origin, - there was, contrary to what com-  
monly happens, a Space of six Lines. The Right Subclavian  
Artery was larger and longer than ordinary ; for it was about an  
Inch in Diameter, .and two inches long, before it pent forth  
the Carotid. There was on its upper Part, where it springs  
from theAorta, a Cystis, which had form’d theTumour, which  
appeared on the lower Part of bis Neck. Hence it was, that  
this Aneurysm was not, as I had fufpectsd, altogether in the  
Aorta, which nevertheless contributed somewhat to its Form-  
ation ; for it was really dilated, or lengthened out, in irs upper  
Part, as I had suspected. . ...

*' s' The* Cavity of this Cystis was about two inches in Dia-  
meter every way. It was placed before the anterior Part of  
the Arteria Trachea, between the tenth and fifth cartilaginous  
Segments inclusively; so that it - covered six of thefe Segments,  
and in its posterior Part adhered very closely to them, aS it  
likewise did on the Left Side, which I did ηοὑtouch.

I endeavoured to disengage it from the Arteria Trachea, but  
it opened as soon aS I touched it with the Knife, though I did  
it with all the Gentlenefs I possible could. Finding that it was  
not possible to feparate the whole Cystis, which *I* at first intend-  
ed, I inlarged the Orifice which I had made in its Right late-  
ral Part, thet I might look into its Cavity. I found nothing in  
it, but was surprised to fee the Cartilages of the Arteria Tra-  
chea discovered. I endeavoured to find out the posterior Side  
of the Cystis, or dilated Artery, which, in Consequence of its  
Situation, should have been opposite to the laid Cartilages; but  
I sound no Side there, except a little Shied, which seemed to  
he very weak, decay’d, and even torn. I also observed, thet  
the Cartilages upon which the Cystis touched, were weaker,  
flatter before, and less projectsd than the rest. And lastly,  
I observed between the sixth and seventh of these Cartilages,  
on the Right anterior Pan of the Trachea, a Hole almost  
round, of two Lines transverse, and two and an half of vertical  
Diameter.

This Hole was made in the ligamentous Membrane, by  
which the cartilaginous Segments are tied to one another . and  
it even bordered upon the sixth and seventh, which by thet  
meanshed become a llttle arched at that particular Place.

Upon sounding the Hole with a Prohe, *I found it passed into*the Cavity of the Arteria Trachea, but yet in such a manner,  
that it was larger at its Entrance, than in any other Part. I  
also judged it proper to take a View of the Stomach, which  
when ί did, I found it filled with Clots of Blood.

**I** was then no longer at a Loss to judge which way the Blood  
discharged by the Mouth had come, and why it had been  
thrown up so quickly, and in so large Quantities; and even  
why it bad not been thrown up sooner, though the Hole in **the**Trachea seemed to be of a.considerably old Date.

’Tis not, in my Opinion, to he doubted of, but the Blond  
passed, by means of this Hole, from the Cystis into the Tra-  
chea ; thence it must needs either mount up into the Larynx,  
or descend into the Bronchia; but the Air inoluded in them  
prevented its taking thet Course, tho’ it was carried thither by  
its own Weight; fo that iit was forced to the Larynx, and  
from thence towards the Palate, from which it was discharged  
by the Mouth.

Though the Hole seemed to heve heen made in the above-  
mentioned ligamentous Membrane, **some** time before **the** Pa-  
tientis Death, or rather before his Haemorrhage, yet the Blood  
did not pass from the Cystis into the Cavity of the Trachea,  
because the internal Membrane of thet Canal had remained en-  
. tire, block’d up the Hole on the Side of the Cavity, and prov’d,  
as it were, a Defence to its Entrance. But this Membrane  
being broken and dilacerated, the Moment hefore the Patient  
died, the Blond contained in the Arieurysin, or rather that of  
the Subclavian Artery, found Doming to oppofe its Passage into  
the Trachea.

I fay this last-mentioned Membrane must have been *first dis-  
tended, and* then broke, which could not well happen otherwise,  
since, heing pretty lax, it must have yielded, and he driven  
inwards by the Blood, which came .from the Subolavien Ar-  
tery.

This appeared from the Form of its Opening, the Lips of  
which projected considerably into the Cavity of the Arteria Tra-  
chea; so that by laying them back towards the Hole formed in  
the ligamentous Membrane, they dosed up the greater Part  
of it.

It now remains, that we consider hew this Hole may heve  
heen made, hetween thefe two Cartilages, in the Membrane by  
which they are tied to one another ; and this is not very hied  
to be conceived; for the posterior Side of this Cystis, which  
adhered to the Arteria Trachea, having been stretched, and  
at last broken, by the impetuous Efforts of the Blond, which  
arrived continually at it; and even destroyed/since it was very  
flender, and on one Side, apply’d to Substances harder than it-  
self, and on the other, exposed to the Shocks of the Blood thrown  
very forcibly upon it, the Blond ailed immedratelv upon **the**Trachea, but was not thrown forth from the Cysfis, by *sen-  
son of* its close Adherence to the Trachea, which served as **a**Side to'its posterior Pars. Tinis same Blood, whether by its  
Serosity, or some of the saline Parts, or by the Effort with  
which it had heen thrown into the Cystis, had gradually wasted  
the Interstices of the cartilaginous Segments, which concurr’d  
to form the Trachea, and had produced this Opening betwixt  
the sixth and seventh of them, hecaofe thet Place might heve  
possibly been weaker, or more expofed to the Efforts of **the**Blond in Consequence of its Direction.

But this Opening was not formed instantaneously, but by  
little and sittle. It was begun, and even pretty well advanced,  
at that time the Patient fpoke to me with so much Resolution,  
and accufed me of cutting his Throat, as it were, by debarring  
him the Use of Wine. He did not certainly at that time think,  
that he was so near the Point of having it really cut, or, at  
least, pierced. The Blond had already broken through the li-  
gamentous Membrane betwixt two of the cartilaginous Seg-  
ments of the Trachea, and bad arrived at, the internal Mem-  
brane of thet Canal, which was now the only Obstacle left  
for it to surmount in its Passage. At this particular time, it  
might have, been truly said, thet the Life of this Soldier hung,  
as it were, by a Hair, since it only depended on the shorter or  
the longer Tine, which so flender a Membrane might be sup-  
posed to hold it out against the Shocks of the Blood, supplied  
by the first and largest Branch of the Aorta. It was scarce  
possible, that fuch a Membrane could, for any considerable time,  
hold it out against a Force capable of overcoming a vastly greater  
Resistance: Thus it was broken in a Moment; and thet was  
the very Moment preceding the Death of rhe Patient.

As the Communication betwixt the Aneurysin and the Ar-  
terra Trachea had hecome free and uninterrupted by the break-  
ing of this Membrane, the Blood contained in the Aneuryfm,  
or rather in the Suhelavian Artery, passed with all its Impetu-,  
osity into thet Canal, and was from it convey’d, as I heve already  
said, through the Larynx towards the Palate, by which it was  
discharged thro’ the Mouth, as longas the Patient had Strength  
enough to sit up , but being obliged to lie down, or rather  
sidling backwards, by reafon of the extreme Weakness occa-  
sioned by such a Loss of Blond, and the Blood, in the mean  
time, continuing to flow towards the Palate, **a** Parr of it then

full into the Pharynx', and from thence into the Oesophagus  
and Stomach ; this it might the more, easily he supposed to do,  
because the Posture of the Patient savoured its Direction that  
way, by its proper Weight, whereas it opposed its Discharge  
by the Mouth.- Hence we may account for the Blood found  
in the Stomach, where It was coagulated. ;

The Effort of the Blood, which flow'd from the Subclavian  
Artery to the Aneurysm; beating continually and immediately  
upon the Cartilages of the Arteria Trachea, could not fail to  
stretch them, and render them stat and weak, as I heve ob-  
served they were.

This Aneurysm seems to me to have been the Consequence os  
the Augmentation of the. Diameter of the Right Subclavian  
Artery, from whatever Cause such an Augmentation might  
proceed; for aS the Diameter of this Artery could not he aug-.  
mented without its Sides being at the same time distended, and  
consequently rendered thinner, winch they were in Reality, in  
proportion as they were dilated, it is plain, that these Sides, he-  
coming thinner, must, of course, have less Force to resist the  
Impetuosity *of* the Blood, which was carried towards them, and  
which was so much the greater, as it came immediately from  
the Aorta. These Sides then were forced to yield, and stretch  
more in some Places than in others, that is, in those Parts most  
which were most exposed, or weakest ; and as they lost them  
proper Tone, and a Power of restoring themselves, the Cystis,  
or Cavity os the Aneurysm, was by that means formed.

’"The Efforts which this Soldier used to make when working  
at his Trade in the Quarries, might have said a Foundation for'  
this Augmentation of the Diameter of the Right Subclavian Ar-  
tery, and by that means rather prove the Cause of the Aneu-  
rysm, than those Efforts which he made in Coughing, during  
the Defluxion of his Breast, to which he attributed it; because  
as in the Work- in which he was employed, the Muscles of  
the Arms must be violently contracted, and remain for a long  
time in that State, they could not sail to intercept the Course  
of the Blood in those Arteries, which supply them with it; and  
this . must have happened more remarkably in the Right,  
than in the Lest Arm ; because the former makes stronger and  
more frequent Efforts than the latter. -. The Course of the  
Blood being intercepted in the Arteries of the Right Arm, it  
must of course have stopped in the Trunk of the Subclavian,  
from which these Arteries take their Origin, and which was  
free from all Compression. The Blood being stopped in that  
Trunk, and rendered incapable of circulating forwards, in  
proportion as it was propell'd by the Heart, and accumulated  
There, it must have dilated the Vessel, and occasioned an Aug-  
mentation of its Diameter.

It is Very rare, that a true Aneurysm opens, and kills the  
Patient in so short a time, especially when it is not more con-  
siderable than this was ; sor one may see Very large ones sup-  
ported by Patients for a great Number of Years, whereas this  
open'd in about the Space of six Weeks.

The Circumstance, which, in my Opinion, best accounts  
for this, is, that the Aneurysm touched upon the Cartilages of  
the Arteria Trachea. I have already taken Notice os the  
Part these Cartilages had in destroying theposterior Side Of this  
Cystis, and consequently in its becoming open. -

It is perhaps still rarer, that one should discharge, by the  
Mouth, Blond, which comes immediately from the Trunk of  
the Subclavian Artery. - As I never saw another Instance of it,  
and have not met with a Cafe of the like Nature in all the Au-  
thors I have read with that Very View, I thought proper to  
communicate the Particulars of a Case so fingulan. *Mem. de  
st Acad. R.* I733.

**HISTORY** VI. *From the Philosophical Transactions.*

In the Year I685. a Servant to my Lord *Culpepcr* got a  
Fall, which caused him a heavy Pain in the Breast for a while.  
About a Month after this Accident, a Musset burst in his  
Hands, and gave so Violent a Recoil against his Right Side, that  
it made him spit Bleed immediately, and continued for six  
Months. A Year after, he began to feel a Pulsation on that  
Side, and then he fpit Blood again, which continued but only  
in the Spring and the Fall, till he died.

He bled likewise by the Nose twice a Year, for a Month  
every time. In I 695. or 1696. a Tumour began to appear  
under the Right Nipple, which, growing by little and little,  
came to an extravagant Bigness, and at last, after ufing some  
emollient Ointments upon it, (os its own Accord) it broke  
fuddenly, and he soon after died. Mr. *Lafage* open'd the Body,  
and found that two ofthe Cartilages of the Ribs were worn off,  
by the continual Pulsation os the Tumour: Part of the *Stcr-  
num Bone* was also worn off, by the same Cause. The Dila-  
tation of the Artery began precisely on its Trunk next to the  
Heart, before it divided itself into the ascending and descending  
Trunks; and though there is but a little Place, yet it did di-  
. late itself *so* excessively, that the Bag did fill up the whole  
Cavity os the *Thorax* on the Right Side, and pressed the Lungs  
so much, that they were thereby much diminished ; the Bag  
by the Outside did .adhere,to the *Mediastinum,* to the *Dia-*

*phragma,* the *Pleura,* and to the *Sternum,* in which it had digodd  
two great Holes, so strong was the Impulsion: The Inside of  
that Bag was lined, almost all over, with bony *Lamina,* Tome  
larger,Tome lesser, like so many Shelis ; the Heart was Inighti-  
ly relaxed, insomuch that it was twice as large as it ought to  
he; and amongst its Fibres there were some Stones, like them  
which are sometimes found in the Lungs of scrophulous Bodies.  
*Philosophe Trans. Abr. Fol.* 3.

**HISTORY** VIL *From the Philosophical Transactions:*

We had lately an Opportunity of examining into the Nature  
of an Aneurysm, by means of a Patient, who was taken into  
*St. Bartholomeuses* Hospital. She was about four-and-thirty  
Years of Age, and of a good Constitution ; but there was a  
Tumour, bigger than one’s Fist, winch began from the upper  
Part of the *Sternum,* between the Origins of the *Museuli  
Mastoidaei,* and extended itself to the *Pomum Adami,* almost  
up to her Chin, and possessed all the Breadth between the two  
*Carotid Arteries. '* The Account that she gave of the Occa-  
sion os it was, that her Hushand, being a passionate Man, took  
'her by the Throat one Day, as she was crying out upon some  
Occasion or other, and griped her so hard, as almost to throttie  
her. She was then with Child, and immediately perceived  
something of a Pain a little above her Heart ; and a sew Days  
afterwards there appeared a Tumour, about the Ligness of the  
Top of her Finger, just above the *Sternum,* and so continued  
without Increase or Pulsation, till she was brought to Bed,  
when it began to be inlarged, upon her having a hard Labour,  
agreeable to whet Practitioners heve observed, that Accidents  
os this'Nature often happen to Women in Labour. This was'  
about four Years since, and from that time it had continued  
gradually increasing, until it was arrived to almost the highest  
Pitch os Extension ; and she hed all along heen troubled with  
a Palpitation, Pain, and Streightness within the *Thorax,* great  
Interruptions in her Rest, and frequent Sinkings, together with  
a constant Beating along the Chest up to the Tumour; in  
which likewise there was a Pulsation correspondent to the re-  
gular Pulse, shaking the Tumour at every Stroke, and mani-  
fest to the Eye as well as the Touch. Notwithstanding this,  
she was otherwise hearty, had her *Menses* regularly, had **a**good Appetite, and was mostly chearful and lively, and never  
Inore so than just besore thefatal Period ofherTumour. The  
*Apex* of the Tumour, which was towards the Middle, in the  
prominent Part of it, was beginning to mortify, through an  
OVer-distention, and the common outward Integuments were  
the first that seemed to suffer: But the Distention continuing,  
the Mortification increased, and was quickly communicated to  
the outer Coat of the Artery likewise, which therefore"floughed  
off as well as the other hi teguments, and heing at length worn  
away, just at the Extremity, made a sudden Aperture; about  
twice the Bigness of a Goose's Quill. The Blood instantly  
gushed forth, as from a Stream or Torrent, and the poor Pa-  
tient died in Iess than a Minute.

Upon opening the Body, we began from the Heart, in which  
there was little remarkable, except that the Left Ventriose was  
somewhat larger, aS were likewise the *Columna Carnea, than*they naturally should he. There was little observable likewise  
in the *Aorta* itself, till we came to the *Curvature*; upon **the**upper Side of which was the *Basu* of the Tumour, forming a  
Cylindrical Stem of four inches long, while in the Cavity of  
the *Thorax*; but extending itself into a circular Form of a  
larger Dimension, when it became external. Upon opening  
the under Part of the *Aorta,* opposite to this Basis, and carry-  
ing the Incision throughout its whole Extent in the *Thorax,*the Trunk retained its usual Form and Dimensions, and was  
not at. all dilated ; but in the upper Part above described, just  
on this Side the Orifice of the Right *Subclavian Antcry,* (which  
was nearer than usual to the Orifice of the Left *Carotid)* there  
was a preternatural circular Aperture of half an Inch Diameter.  
Upon dividing this Aperture, and carrying on the Incision to  
the *Apex* of the Tumour, its whole internal Substance appeared.  
The Edges of the Aperture, at the Basis of the Tumour, were  
hard, and almost cartilaginous, and seemingly the Remains of  
thick and fleshy Fibres, which, upon a nicer Inspection; they  
appeared to he in Fact; brz. the broken Fibres of the Inner,  
or what is commonly called, the Muscular Coat of the Artery,  
which terminating here, the Tumour immediately increased **to**two Inches Diameter, and continued of that Dimension, till  
it came out of the Neck, between the Clavicles; but then  
extended itself circularly to a Diameter of above three Inches,  
the Covering of which was nothing else but the outer Coat of  
the fame Artery, all along dilated from the Base, even to the  
Extremity of the Tumour. The Cavity was, for the most  
part, filled with a sort of *Polypus,* or *Sarcoma,* in winch, never-  
thelefs, there were three Sinuses, or Passages, that were kept  
open by the constant Influx of the Blood, and communicated  
near the *Apex* with one another, (that in the Middle being the  
largest) and terminating in one towards the Extremity Gf the  
Tumour, not sar from where it broke. *Philoscp. Transect,  
abridg'd. Fol.* 8. - .

**. I** shall conclude these Histories of Aneurysms with the follow-  
imt Remarks by Dr. *Nicholls,* which I find in the *Philosophical  
Thanfactions,* because they seem to set .the Nature of these  
Tumours ina just Light.

An Aneurysm is, by all Authors, defin'd to be a soft, circum-  
scribed Tumour, in which there is a sensible Pulsation of **the**.Artery, to which it adheres. As it is certain, that any Turnout,  
of what Kind soever, tying on, or adhering to, any considerable  
Artery, must necessarily he mov'd' by every Pulsation of such  
Artery; so this Pulsation (unless understood in such mariner as  
**Γ** shall hereafter explain) can no ways he admitted as the true  
Diagnostic, whereby to specify the Difference between thin kind,  
of Tumour and any other. An *Aneurysin* is found most chin-  
inonly to succeed. Falls, Vomitings, Labour-strains, and such  
ether Motions or Indispositions of the Body, as, by compressing-  
the great Branches of an Artery, any ways stop the progressive  
Motion of the Blood. It is obvious, that, as the Section os  
**the** Artery, above the Compressure, must, in its natural State,  
he sornettines very incapable of containing at once the whole  
Quantity of Blood, which ought only to have pass'd thro'it  
successively; and as the Forde os the Heart may frequently  
exceed the Resistance it may meet with from the Coats *of the.*Artery, so the Consequence *os such* a Stop to the progressive  
Motion os the Blood, inay occasion either a Rupture of tho  
Artery, Or a Distention of the Artery without **a** Rupture, or **a**Rupture os the internal Coats os the Artery, and a Distention  
of its external. A Rupture of the large Branches of the *Aorta.*necessarily allows so plentiful Effusions of the Blood, aS to occa-  
sion immediate Death ; while the Capillaries may he burst, with-,  
out any other Injury but a flight *Ecchymosis*; and the Tumour  
form'd by the effusion from them, will he diffused and super-  
ficial. A Rupture of the mean Branches (such as descend he-,  
tween the *Tibia* and *Fibula,* the *Radius* and *Ulna, lati.)*will he attended with a considerable effusion of Bleed; but as  
the Blood will find a Passage hetween the Interstices of the Mus-  
cles, it will never form a circumscribed Tumour. However,  
the Effusion heing continued, *per Salturn,* thro' the ruptured.  
Artery, will give a saint Pulsation, and consequently some Re-  
semblance os the *Aneurysm* ; for which Reason it is, by some  
Surgeons, term'd a *Bastard Aneurysin.* Whether or no an  
*Aneurism* be aTumour form'd by the *Dilatation os* the Artery,  
or by a *Rupture* of the *internal* Coats os the Artery, and a *Disc  
tension hi* **the** *external,* has sor some time been a Matter of great  
Dispute; each Party protesting (perhaps too unjustly) against.

. the Possibility os the other's Opinion: AS to the Possibility of  
- ah Artery’s heing dilated, it stands supported by Reason and Au-  
topsy. We find the Uterine Arteries constantly increased in  
Thickness and Diameter, in proportion as the *Uterus* is distend-  
ed; and many Coses os Palpitations os the Heart have been  
attended with great Dilatations os the *Aeetat* Instances os which  
**I** have seen both in human and brute Subjects. Such a Dilata-  
tion will necessarily follow a constant or frequent Pressure on’  
any Part of the *Aorta,* provided such Pressure does not entirely

' stop the progressive Motion of. the Blood thro’ the *Aorta :* But,  
on the other hand, such a .Dilatation will always retain some--,  
what of the Form of the Artery. The Resistance will not be  
every way equal, as in the extravasate Tumours ; because the  
quaquaversal Pressure of the Bleed will be controul'd by the  
Pressure on the Artery, and the Resistance from the Coats of **the**Arteries, so as necessarily to form a Cylindroid ; and the Con-  
sequence os such a Dilatation cannot (if consider'd abstractedly  
from its Pressures) he worse (if so bad) than from a varicous  
Vein. Again, they who conceive an Aneurysm to he a *Rup-  
ture, of* both Coats os the Artery, oppose their Opinion who  
imagine the internal Coat to he ruptured, and the external to  
he distended, by comparing the two Coats in Question, and  
urging, that, as the internal Coat is so much thicker than the  
external, it seems impossible the last should be sufficient to resist  
a Tome capable of destroying the first. Were these two Coats  
similar, aS to their Structure, we might then compute their  
Strength by their Thickness, and this Argument would he of  
much greater Force than ar present it can he; because the in-  
ternal Coat being composed of annular *Fasciculi,* whose Sides  
have but a very weak Cohesion, their Power of resisting will  
not he measurable by the Strength of those *Annuli,* but by the  
Force with winch they adhere laterally. And, on the other  
hand, the external Chat being composed of Fibres equally inter-  
woven, and of a quite different Composition, it may either  
**exert** a greater Resistance, or he capable of much greater Dila-  
rations than the internal : But, that *Autepfy* may **evince the**Truth of this Difference in the Strength of these Coats, is will  
he found, by any one Who pleases tossy the Experiment, that.  
by blowing into the Pulmonary Artery, the internal Coat will  
soon burst, and the external form itself into aneurysmous Tu-  
mours *(which Experiment was accordingly tried before the Socie-,  
ty, to their Satisfaction).*

Upon considering all which, and having, by *Order of the.  
Society,* both privately and puhllckly examined an *Aneurysin,*which I find to he round, like other extravasate Tumours, un-  
less when controul'd by any notable Pressure, and that the *Sac..*

*eulus* **does not divide into Coats, as the Artery from whence** *it  
arises* does, I am induced to think, that this Aneurysm is A  
Tumour form'd by **the** Blood's being forced thro' *the Ligamen.,  
tous, or what* is call'd the Muscular Coat,, and distending **the**membranous or outer one: And because the impetus of the  
Blood will, as it were, perpetually press -through the Aperture  
into the Tumour, and he again (at least in Part) return’d\* by  
the Elassicity of the external Coat ; therefore such a Turnout  
will rather have a pulsatile Dilatation, than a *Pulsation,* for its  
true Diagnostic. \* *Phil. Trans. Abr. Vol. S... ......*

As Aneurysms frequently happen from Accidents in Bleeding,.  
**I** shall first-specify the necessary Method of proceeding, in order  
to prevent an Aneurysin, .when a casual Wound of an Artery,  
in Phlebotomy, makes it suspected, that one may ensue.

In letting Bleed, it sometimes happens, that the Artery is cut  
instead of the Vein, or that the Vein and the Artery are  
wounded at one and the-same time. This Misfortune generalsp  
happens, when the Surgeon intends to open .the *Basilic Vila* **m.**the Arm ; for near this Vein there usually lies some large Ar-  
tery, and generally the principal one in the Ann (though I have  
often observed the large Artery near the Cephalic Vein); the  
pricking os this brings on, sarthe most part, 4 terrible Effusion  
of Blood, an Aneurysm, or even, as *Hildanus,* some others,  
and I myself have observed, a Gangrene of the Arm, from the  
Circulation of the Blood heing stopp'd in it; or, which is still  
mote terrible. Death itself, from an immoderate Effusion os  
Blood. Now, that art Artery.is wounded, may he pretty well  
known from these Signs - ' - . χ

The Blood bursts from the Orifice at certain Intervals, and,  
as it were, by Starts; and springing forth, in a. more Violent  
manner than when no such Accident happens, it describes Cer\*  
tain Arches in its Progress. Its Colour is also more red and  
florid, than that which flows from a Vein open'd as it ought to  
he. Besides, if the Part below the Orifice is press'd with the  
Finger, the Bleed bursts forth with the greater.Impetuosity^  
hut if any Pressure is made above the Wound, .the Impetus of  
the flowing Blood is diminish’d.. The Reverse os all this hap-  
pens when a Vein is dUly open'd ; but if at.any time this Mis-;  
fortune should happen, 'tis reasonable the Surgeon should be ap-  
prised of the Danger that attends it, that he may both preserve  
such a Presence of Mind, and Turn of Thought, as Inay enable  
him to take proper Measures, and conceal, if possible, his **er-,**ror both from the Patient and the By-danders. He must there-  
fore diligentiy observe, in the first place, whether the Blood  
flows freely from the Orifice, or whether it insinuates itself  
copioufly between the Muscles and the Skin ; if it flows freely,  
a Very large Quantity of Blood is to be taken from the Patient,  
and even till he saints away. The Patient, in the mean time,  
and the By-standers, are, according to the Advice of *Dionis,* to  
he artfully wrought up into a Perfuasion, that the Perfora  
abounds too much in Blood; that 'tis too hot, and, aS it were,  
boiling; and that, in consequence of these Circumstances, his  
Cose calls sor so large an Evacuation : For since the Blood ceases  
to flow when the Deliquium comes on, the Wound may he con-  
veniently tied up, and the Abundance or Impetuosity of the  
Blood, by that very Means, hinder'd from bursting out afresh,  
producing an Aneurysm, or at least from preventing theAgglu-  
tination of the Wound, in the mean time, the Surgeon ought,  
is possible, to catch an Opportunity os privately conveying **a**Piece of Money into the first Compress, which he is to apply  
immediately to the Wound, for its more effectual Compression ;  
then, after cleansing the Patient's Arm, he is to apply a second-  
Compress, broader than the first; and even a third, broader ,  
than the second ; and all of them sufficiently thick: And then,,  
bending the Patient’s Elbow, he is to apply a double Bandage,  
both with a View to retain the Compresses more firmly, and  
compress, and agglutinate the Wound of the Artery more effe-  
ctually. Thefe Bandages are to he applied in the same manner;  
as in common and ordinary Venesections. It is also highly,  
proper to apply a narrow, thick, and long Compress upon **the**Tract of the *Brachial Artcry,* all along from the Wound.**to**the Arm-pit; and this Compress is to he fix'd with a Bandage  
applied in obtuse spiral WreathS, that the Brachial Artery being  
thus gently compress'd, **the** Impetus of **the** Bleed upon the  
Wound may, by that means, be considerably diminish'd: And  
that the By-standers may not so much as entertain the remotest  
Suspicion of the Error committed, they are, with a grave and  
serious Ain, to he told, that it was absolutely impossible to stop  
the impetuous boiling Blood of the Patient, without the Assist.»  
ance of so artful and curious a Bandage. *1 hope Father* Paten-  
nin, *when be tranflated* Dionisss *Surgery into the* Tartar, or  
*modern* **Chinese** *Language, left out this Advice above-mention?d ;  
otherwise it would give the* Chinese *a horrid Idea of theVillany of  
the* European *Surgeons, which Charity obliges us to presume they  
are seldom guilty of. Ac the most political thing a Surgeon can  
possibly de, is to be honest, 1 suould advise him, in the Cafe before  
us, to des.covcr fairly the Accident, that farther Advice and Assist-  
ance may be immediately practised ; for the JVils.are of the Patient  
is of infinitely more Importance, than the Reputation of any Sur-  
geon -whatever.* **Instead of the first Compress, arm'd with a**

Piece of Money," a little chew'd Paper, especially if \* immersed  
in melted Grease, and well wrung out, may he applied to the  
Orifice withIhe same, if not mote Propriety; and some Com-  
presses, becoming gradually broader, aS in the other Cafe, are  
to he clapt upon is, and secured with the same Bandages, and  
- in the same manner.

After this is over,’ if the Patient has not recover'd from his  
Deliquium, he is to he rous'd, by applying to his Nostrils a  
Linen Cloth soak'd in Vinegar or *Hungary* Water, by pouring a  
littie Wine intothis Month, and by opening the Windows, that  
**he** may enjoy the Benefit of the free Ain: When this trouble-  
some Scene is closed. Rest, together with a spare and sender  
Diet, is’ carefully to he recommended to the Patient: He is  
**. eVen** to he told, in plain Terms, that a most dangerous effusion  
os Blond willensue, is either by an improper Regimen, Mo-  
tion of his Arm, or any other Cause, the Bandages should be  
unloosed or give way.’ For this Reason, Tis not only expedient,  
hut absolutely'necessary, that the wounded Arm, moderately  
hent, should he supported in the Day-time with 4 Towel, or  
Scarf, hung about his Neck, and by several Pins fix'd to his  
' Cloaths, that his Arm may the more effectually be kept from  
moving; and in'the-Night-time it is to he laid on a soft Pil-  
low. \ ....... γ ' ' .' - \* \* " ’

' Some Hours after the Application of the Bandage, the Sur-  
geon ought frequently To Visit the Patient, take a careful Survey  
**of** the Bandages, and the wounded Arm ; and observe whether  
a fresh Effusion of Blood, a hard and painful Tumour, a Vehe-  
ment Inflammation, or a Gangrene, have already happen’d, or  
are likely to happen; and whether the.Bandages are still firm  
and tight. If all other Appearances are savourable, tho' a large,.  
but at the same time a soft. Tumour arifes about' the Part af-  
fected, the Bandages are to remain in that State, and not to her  
loosed before the fourthTlay ; for a Tumour of that Kjudrpor-  
tends no III, even tho'.it should diffuse itself thro' the whole  
Arm ; bus when the Bandages appear too loose, theyinsist he  
taken off with the greatest Caution, and again applied more tight-,  
**ly;** whilst they are taking off, the Brachial Artery; should al-  
ways be compress'd with a Torcular, or at least with the Thumb  
of an Assistants, about theMiddle os the Ann ; and the Wound  
itfelf should always he compress'd with the Thumb or Finger  
**of** the Surgeon, till the same Bandages, or others, together with  
fresh Compresses, are again applied s But we are to take pani-  
chlar Care, that the Compresses, especially the undermost, or  
the chew'd Paper, if adhering to the Orifice, he nor pull'd  
away, but rather he allow'd to fall off of their own Accord.:  
And, indeed, this Pannage is carefully to he survey'd, and when  
itheoomes loose, to he made tighter, after putting a littie Balsam  
*elf Peru* or *Capaivi* into the Wound, so long as there is even  
the least apparent Danger os a fresh Effusion, and till the  
Wound is effectually agglutinated. But if, unluckily, a fresh  
Effusion Come on, theTrunk of the Brachial Artery, about  
the Middle of the Arm, is to he strongly compress'd, either  
with aTorcular, or the Thumb or Fingers of an Assistant, as  
**we** advised above, till other and longer Bandages, together  
with fresh and thicker Compresses, are prepar'd, as in the first  
Dressing ; the former Applications are to be removed, the  
Wound is carefully to be cleansed with warm Wine, or Spirit of  
Wine, and the Compresses and Bandages are again to be applied  
in the manner above directed, till the Wound is agglutinated.

Put if a Gangrene appears, and is occasion'd by the Tightness  
**os** the Bandages, in that Cafe they are to he remov'd with the  
Cautions already given; and, after inlarging the Compresses,  
they are again to he applied a littie more gently, and the Ann  
itself IS to be psy’d with such Medicines as are good against  
Gangrenes: But if the Gangrene proceed from an Obstruction  
**of** the Circulation'of the Blood, for want of another Artery in  
the Ann, which, by the way, is rarely wanting, in this Case  
there is an absolute Necessity for having recourse to Amputa-  
“from ' . .

But even tho’ none of thefe Misfortunes should happen, and  
tho' the Wound should, for feme time, remain in this hopeful  
Condition, the Patientin nevertheless to he advised to keep a  
Bandage on the Wound for eight, ten, or fourteen Days, and  
indeed the longer the hetter; and to keep his Arm in aState of  
Rest, lest the Impetus of the Blood should again destroy the  
tender Cicatrix, or raise it into an Aneurysm. The Regimen  
alfo, aS in the Beginning of the Disorder, must as yet he spare  
and (lender: Wine, and other strong Liquors, are entirely to he  
avoided, that a too Violent Motion of the Blood may be pre-  
vented; winch, if it should happen, is to he taken off by open-  
ing a Vein in some other Part.. For thus the most dangerous  
Evils, that is,"an excessive effusion of Blood, and an Aneu-  
rysm, are not only guarded against, but the wounded Artery is  
more effectually agglutinated; especially if, when the under  
Compress, or the chew'd Paper used for that Purpose, salis off,  
**a** littie Balsam of *Peru* or *Capaivi,* or any other balsamic Es-  
sence, he applied to the Wound. By these means the Patient  
is frequently restor'd fo effectually, that he sustains no manner  
of Injury by the Error of the Surgeon/

These are the Measures to he taken, and **this the** Course **to**he follow'd, by the Surgeon, when neither Patient nor By-  
standers suspect the Error ; but if any one should at first suspect  
the Misfortune, and see the Surgeon’s Error, in this Case 'tis  
better ingenuously to own his Blunders, which indeed may he  
committed by any one ; and after laying down the Causes of the  
.Error, which could not have been guarded against even by the  
most fltilful and quick-sighted Surgeon, he is to encourage the  
Patient and By-standers by the Promise of a fpeedy and effectual  
**Cure,** provided his Directions are follow'd. This open Inge-  
nuity, and frank Confession, of the Surgeon frequently lays a  
Foundation for a speedier and surer Cure, than if the Patient had  
not suspected the Error; because, being by this means apprised  
of the Danger, he is the more careful to follow his Surgeon's  
Directions, and both do and suffer whatever is thought neces-  
sary to his Cure. .

But when the Orifices os the Skin and Artery do not exact-'  
**ly** correspond to each other, but the Blood, flowing from the  
wounded Artery, insinuates itself between the Muscles and the  
Skin, the Surgeon is then to proceed in a quite different Me-  
shod : For, in this Case, 'tis by no means proper to bleed the  
Patient, *ad Animi Deliquium,* because, in the mean time, such  
a Quantity of Blood may possibly insinuate itself hetween the  
Muscles and the Skin, aS may lay a Foundation for a Sphacelus  
by its Corruption, or at least create an immediate Necessity of.  
performing the Operation for .the Aneurysm. In this perplexing.  
State os Things, therefore, is the Orifice os the Skm cannot,  
by the Assistance of the Finger, he made to correspond so to.  
the Orifice of the wounded Vessel, that the Blood Inay not insi-  
nuate itself hetween the Muscles and the Skin, but flow freely  
out of . the Body, the Orifice is immediately to be stopp'd with  
the Finger, or a Piece of chew'd Paper; and several Com-  
presses, becoming gradually broader, are to he applied to it;  
and the Comprefles are to be retain'd and fix'd by Bandages in  
the manner above-directed ; nor is the Application of that long  
Compress, and Bandage, which we have recommended for  
compressing the Trunk os. the Brachial Artery, to be neglected.  
A large Quantity os Blood must also he taken from some other  
Part os the Patient's Body, is Circumstances call for it: After  
this the same Steps must he taken which we have directed above,  
till the Wound he effectually agglutinated. Soon after **the**Patient must again he visited; for it sometimes happens, that,,  
aster the Application of the Bandage, no Blood flows from **the**Wound, but fo insinuates itself hetween the Muscles and Skin,  
as to distend the Arm sometimes to a prodigious Size. *Dionis*gives us a memorable Case of. this Nature, in winch he was  
obliged to lay open the Skin os the whole Arm, and evacuate  
four Pints of Blood, which had fill'd all the intermediate Space  
os **the** Ann, between the Elbow and the Scapulae *Ruyseh* also  
gives us an Instance much of the same Nature, where the Bloed  
was found coagulated almost thro' the whole Arm. *lieistcr.*

CURE of ANEURYSMS.

ANE URISMisaT erm in U se among the Surgeons, by which  
they signify a Tumour caused by a Dilatation, Percussion, or  
Rupture of an Artery, full.os Bloed, and commonly attended  
with a Pulsation. They reckon two Kinds of Aneurysms, **the***Spurious* and the *True:* The true Aneurysm is, when a Tu- .  
mour, with more or less Pulsation, arises from a Dilatation  
either of the whole Artery, or only os one Side thereof, almost  
in the same manner as the Tumours call'd *Varices* are generated  
in the Veins. Both these Sorts of Tumours may he consider'd  
as Hernias of the Arteries and Veins; and by some, for that  
Reason, are so call'd. On the other hand, a *spurious* Aneuryiin  
happens from an Aperture made in an Artery, either by exter-  
nal Violence, as in Phlebotomy, a Wound, or a Contusion;  
or by an Erosion, however caused, whence there is produced an  
Extravasation os Bloed betwixt the Skin and the other Parts ;  
from whose Effusion, and Detention under the Skin, the Part  
affected swells, by little and littie, to an excessive Degree, and  
becomes os a livid orblack Colour; or when a true Aneurysm  
happens to swell in so extraordinary a manner, that its contain-  
ing Coats being distended and broken. Blood either issues from  
a Wound, or there is an Effusion os the same under the Skin,  
which remains whole and unperforated. Hence arises a Very  
troublesome Tumour, which has littie or no Pulsation, and less  
Elevation than in the true Aneurysm. Sometimes a Gangrene  
follows the Corruption of this Effusion of Bloed, or Death itself,  
from the profuse Haemorrhage. But we may also distinguish  
Aneurysms by the Accidents which accompany them: Thus  
some are destitute of the bad Symptoms which attend other  
Kinds; and there are some, particularly such as are called sea-  
*rious,* which are accompanied with Immobility, a great Pain,  
and a Corruption and Sphacelation of the Part: These may,  
not improperly, he styl’d *complicated*; and the former Kind,  
*simple.* They may also he distinguish'd into *external* and finer-  
*nal*; the first affects some external, the other an internal Arte-  
ry : And, to name no more, there seems to he a Very remark-  
able Difference between Aneurysms, aS some of them, tho' of

a good Bigness, are now-and-then Void of Pulsation; others  
are constantly attended with the same, in a greater or. less De-  
gree J for you must observe, as was said hefore, that the *spu-*rious Aneury sms, especially the larger Sort, have scarce any Pal-  
sation ; but in the true Kind, and principally those of a small  
Size, the Pulsation is pretty strong; and in some of these  
Aneurysms diminishes as the Tumour increases, but in others is  
not diminish’d, but rather increases with the Tumour.

The true external Aneurysm, besides the Properties just now  
mention'd, is commonly at first a very small Tumour, often no  
bigger than a Hafle-nut, with a constant Pulsation. As *for*internal Aneurysms, because they are invisible in the Beginning,  
we can say nothing of their Size. To proceed then with the  
other; the Place of the Tumour is, for the most part, soft to  
the Touch, and a fluctuating and renitent Liquid is perceiv'd in  
It. It very seldom deviates from the natural Colour os the Skin,  
and beats hke other Arteries. The Tumour, when press’d with\*  
the Finger, while it is yet small. Vanishes, and returns when  
the Finger is removed ; but this Trial Very seldom or never suc-  
ceeds, aster the Tumour is advanced to any considerable Size ;  
fur the Tumour increases by degrees, and sometimes arrives to a  
Vast Bigness. The spurious Aneurysm swells, with a Pain, and  
Hardness, and a Lividness *os* the Skin; but the Tumour is  
more flat than in the other, and generally without a Pulse ;  
when it is press'd, a Noise is perceiv'd ;-and oftentimes the  
whole Member, or at least a great Part of it, being more and  
more inflated, at last putrifies, and hecomes sphacelated.

Aneurysms Very often arise in the Anns, that is, whenever  
the Surgeon, in opening a Vein, especially the Basilica, pricks  
an Artery at the same time, Orat least touches it with his linn-  
cet. For, in such Coses, the other Coats of the Artery, or  
those which were newly agglutinated, being worn and press’d  
by the continual Pulsation os the Blood, are more and more  
debilitated and distended, till at last they give way for the Rise  
os a Very terrible Tumour. Wherefore if,., in the Space of  
some. Days or Weeks aster Venae section in the Ann, there\*  
arises a Tubercle with a Pulse in it, as descrihed in the preceding  
Paragraph, you may conclude, that you see the Appearance of  
an Aneurysm. But, hesides the Surgeon'S Instrument, there  
- are a Multitude of other Couses, both internal and external,  
that give Birth to Aneurysms, as well in other Parts as in the  
Arms : For it is no unusual thing for remarkable Tumours to  
arise in several Parts *of* the Body, from Wounds, Bruises, and  
Suppurations os the Arteries, by external Causes. " And 'tis not  
impossible for the Breast and Abdomen' to he inwardly affected  
with Aneurysms, from the Weakness of the outer or inner  
Coats of the Arteries, however occasion'd, whether by exul-  
ceration, for instance, or erosion. This is abundantly con-  
firm'd hy undoubted Observations os *Fallopius, Severinus,  
Ruys.ch, Landsi,* and myself. The Causes, indeed, especially  
of internal Aneurysms, are often doubtful, or wholly uncertain;  
however, iney must he either internal or external: And 'tis  
probable, thatAneurysms, many times, owe their Rise to a Fall,  
or .to Blows, or former Fractures,. to Violent Motions in listing  
or pushing great Weights, to Leaping, hard Riding, or any  
other violent Concussion, by which an Artery may happen to  
sustain too great a Percussion, and he debilitated, or be tco much  
press'd, and by that means distended into a Tumour: Or they  
may he owing to an inflammation. Suppuration, and erosion,  
occasion'd by an Ulcer os an adjacent Part, or a Part of the  
same Artery, whereby its other Coats are render'd too weak to  
sustain the Forde of the Blood that rushes into them, and so are  
obliged to stretch and give way, and by degrees to expand into a  
Tumour. So it has been often seen, that from a flight Hurt  
os the Artery, by a Knife, a Dart, or any other sharp Instru-  
ment, especially in Phlebotomy of the Arm, as before observ'd.  
Aneurysms have proceeded; and eVen when the Artery has heen  
but just touch'd, and only its outer Coat flightiy wounded, by  
the Point os the Lancet, tite inner Coat remaining entire: For  
this flight.Nurt is the Occasion, that the inner Coat, at the Place  
where the Injury is received, hecomes unable to resist and sustain  
the Pulse *of* the Heart, and the pressing Influx os the Blood,  
but is forced to give way; by which means the weak and injur'd  
Part is by degrees dilated into a very sensible Tumour, call'd  
an Aneurysm. Now if we apply this mechanical Theory of an  
Aneurysm from external to internal Aneurysms, many things  
may happen to injure the Coats of the internal Arteries: Thus  
an Artery may he weaker, and heve less renitent Force, in a  
certain Place than elsewhere, whether the Couse of the Defect  
operates on the external Superficies os the Artery, or within its  
Tunics. So also from a Fall, a Blow, a Bruife, an Inflam-  
ination. Suppuration, Ulcer, *etc. some* Part of an Artery may  
he so dchilitated, or corroded, as to become unable to sustain  
the Impressions os the Heart and Blood, and so an Aneurysm  
may he produced ; especially if some external Force, as violent  
Motion, a Fall, Concussion, or the like, happen to concur.

" How to prevent an Aneurysm, from an Accident in Bleed-  
ing, is spectsy'd above. I am now to give the Signs by which  
you may know, whether, in opening a Vein, you happen to hurt

an Artery, tho' but flightiy ; bur as there are no Certain, or, as  
they call them, pathognomic Marks os a flight Hurt of that  
Kind, we must trust to probable Conjectures. Whenever,’  
then, we plainly perceive in Pulsation against the Point of the  
Lancet held to the Ann, but no Blood springs out os the Arte-  
ry, we may reasonably suspect, that the outer Coat of the Ar-  
tery has been touch'd, and suffer'd Injury: To avoid therefore’  
the Danger os a supervening Aneurysm, you are to enter on the  
Method of Cure directed above.

But is, through the Imprudence or Negligence of the Patient,  
or the Surgeon himself, the thing he disregarded, or the Ban-  
dage, there advised, lest off too soon, an Aneurysm isveryeasi-i  
ly form'd, and shews itself For it is to he observ’d, that  
whenever a Tubercle, with a Pulsation io it, arises within the  
Space os a Month aster a Vein has heen open'd, there is an  
Aneurysm, which owed its Rise to'a flight Hurt os the Artery.'  
in the Anrtio But a true Aneury sm, while'in is yet fresh and  
small, brings littie or no Inconvenience'with it, besides an un-i  
easy Pulsation, and a flight Tumour; but afterwards, when by  
little and littie it is increased, and grown to the Bigness of an'  
Eggs or a Manis Fists or his Head, of which last there are  
Instances/ (see *Tab.* 32. *Fisa* 6.) it is. attended with a most  
intense Pain, an Immobility of the Part, a Weakness, and other  
ill Symptoms; the Consequences os which are, that, without\*  
immediate Assistance, the Coats os the Arteries, becoming  
every Day thinner, are at last burst, to the great Prejudice of  
the miserable Patient, and oftentimes not without instant Dan-  
ger of Death '; for either the outward Skin is burst at the same '  
time, and a dreadful Haemorrhage succeeds, or it remains en- ‘  
tire; in which Case there chines on, by littie and little, a Cor-  
ruption of the retain'd Blood, and a Gangrene. Tho' almost'  
all Aneurysms are attended with Danger, and, aS *Bartholine* and'  
*Harder* allures ns, few ever saw a happy Event of an Aneurysm;  
yet the "most troublesome and dangerous are usually such as ’  
affect either the internal and largest Arteries, or those which  
lie very much conceal’d, and out *of* Reach. Os this Kind are’  
those Aneurysms which arise in the Aorta, in the Beginning of  
the Brachial, Subclavian, or the Carotid Arteries, *etc.* So also,'  
for the most part, are these Aneurysms incurable which affect  
the Carotid Artery in the Neck, the Subclavian and Axillary  
near the Shoulder, and also the Crural Artery, especially near  
the Belly. For, during the Operation, there usually happens a  
dreadful, and often mortal. Haemorrhage; or they terminate in  
a Gangrene and Sphacelus, ' Aneurysms in the external Arte-  
ties are of a less dangerous Nature, and are frequently cured ;  
of this Sort, in particular, are such aS affect the Arteries os the  
Cranium, those on the Outside of the Ribs, of the Foot, Hand,  
and lower Part os the Arm. But in an Aneurysm in the Arm,  
which is caused by the Prick of a Lancet, unless it be taken  
care of in the Beginning, in which State, thy Compresses and  
Ligatures, it is often cured, the Operation is os doubtful event:  
For, in this Case, aS the Trunk os the Artery wants to be con-  
glutinated and closed, it can hardly he avoided but the elbow,  
and Hand, either through a Deficiency in the larger Branch, or  
the Smallness of the lesser Ramifications, must begin to want  
sufficientBlood and Nutriment; in which Circumstance a Gan-  
grene and Sphacelus, and oftentimes a Mortification os the Part,  
are nigh at hand, as I have learn'd from long experience, con-  
firm'd by the Observations of several Physicians ; *so* that we are  
often obliged to cut off the corrupted Part, to save the Patient's  
Lise, who yet, for all that we can do, many times perishes  
after the Amputation. Whenever an Aneurysm breaks spon-  
taneoufly, and contrary to expectation, there is generally so  
great an effusion os Blood, that the exhausted Patient must die  
immediately, is not very speedily assisted by means of the Tour-  
niquet, and other things os that Nature, finder a skilful Opera-  
tor. Equal, almost, is the Danger, wherr a Tumour os this  
kind is treated like in Abscess, .and suffers an Incision from an  
ignorant Surgeon. But there is one thing, which, above all  
others, merits Observation, which is, .that the spurious Aneu-  
rysms ure sarInore dangerous than the true ones: For these  
latter, especially is they are of no extraordinary Size, may he  
endurfd for many Years, and even to the End os Lise, without  
much Trouble or Hazard, especially with the Use of a proper  
Ligature or Bandage ; -whereas, on the contrary, the spurious  
Son immediately hetray their Tendency.either to an excessive  
Haemorrhage, or to a Corruption and Sphacelus. Indeed, both  
Kinds of Aneurysms are to he dreaded, in proportion to thnir  
Largeness, and dangerous Situation; insomuch that the intrepid .  
and most experienced *Hildanus* never attempted any Chirurgi-  
cal Operation upon them; and *Ruys.ch* exprelly says of the Sur-  
geons of *Amsterdam,* that not one of them, for above twenty  
Years, undertook an Operation of that kind. So, also, a spu-  
rious Aneurysm is generally more difficult to he treated with the  
Knife than the true Sort; because the extravasated Blond being  
diffused on all Sides, and concreted, creates a great deal of  
Trouble to the Surgeon in removing it. As for internal Aneu-  
rysms, since they frequently lie conceal'd, 'tis plain, that they  
are Out of the Reach of the salutary Art of Surgery, because

**they** are not so to he come at by **the** Hands; or if **these inter-**nal ones should, in some measure, offer themfelves to Sight,  
there is no opening, or making an Incision in them, without  
immediato Hazard of Life , for which Reasons thofe consiun-  
mam Surgeons, *Fallopius, Pare,* and *Severinus,* never attempted  
their Cure. Upon this Consideration we alfo, for out Part, lest  
we should he thought to throw away Time and Advice upon a.  
desperate Cafe, shall only treat, in the therapeutic Part, of ex-  
tornal AneurysinS, where there is some Prospect of a Cute.

That every Person may he instructed in the hest Method of  
curing fo dangerous a Disorder, we shall make it cut principal  
Endeavour, in the first place, briefly to explain by whet Me-  
thods Aneurysms, that arise in the Flexures of the Cubit, or  
Elbow, which happen mote frequently than elfewhere, are  
most properly to he treated; whence it will sufficiently appear,  
aster what manner other .Aneurysms, which are less frequent,  
ought to he managed. Now when a true Aneurysin ariles in  
the Flexure of the Cubit, while it is in the Beginning, and bin  
small, or at least of no considerable Bigness, there are two  
Ways of Cute, one by Compress and Bandage, the other  
hy the Knife. The sonnet of these is executed in two differ-  
ent manners, that is, by Bolsters and Fillets; or by some pe-  
culiar Instruments, adapted to the Purpose. The Method of  
Compression for a true Aneurysm, while it is little, and for a  
spurious one, where is no Effusion of Blond hetween the Parts,  
is always to he try’d in the first Place; for it would he Cruelty  
to set about a dangerous Incision, when a milder Method of  
Cute would answer the End. After we heve made a Repression  
of all the Blced from the Tumor, the Aneutyfm-may he con-  
tracled, and kept down, by means of. Compresses of chew’d  
Paper, or an astringent Plaister, and afterwards with larger  
Compresses, and proper Bandages, which, if kept on the Place  
for some Weeks or .Months, may be of great Service. *This  
Method,* to pass over more modern Examples, was long ago  
practised by *Hildanus, Tulpius,* and *ldagerius.* But if a Liga-  
tore ofethis Kind win not aofwer the Purpose, as M. *Bourdelot,*Physician to the King of *France,* experienced in his own Cafe,  
the Surgeons heve invented proper Machines, by means of  
which the smaller Sort of Aneurysms are not only repressed and  
kept down, but with the Help especially of a strengthening  
Plaister, are usually cured. Two of these, among many, are  
represented *Tab.* 32. *Fig.* 8. and 9. thof .their Application  
and Use are better demonstrated by Inspeciion, than described  
in a Multitude of Words. In the mean time we hope they will  
he clearly enough understood from the Explication of the above-  
mentioned Plate, which fee. , „ 7 . - :

If the Aneuryfm he too large to submit to Repression; either  
**by** Ligature or Instruments, or if a true Aneurysm, by. the  
-bursting of the Coat of the Artery, he - degenerated into ,a  
.spurious one, especially if the Blond diffused amongst the Flesh  
tends towards a Gangrene; if there he any Immobility of the  
Ann, attended with Pain; in short, of there he arty Danger,  
that from the Bursting of the Tumor and Skin-together, the  
‘ redundant Haemorrhage should kill the Patient-on a hidden ; in  
.all thefe Cafes Recourse must he had to the Knife. - The .Ope-  
ration, however, heing very painful and dangerous, is not to  
the undertaken rashly, but with the .utmost Caution and-Cir-  
.cumspectiomi and aster Consultationshad with Physicians, and  
.the most experienced Surgeons, sor sear that if any ill Accidents  
should happen,, that, were unforeseen, they should readily he  
imputed to the Ignorance or Temerityof the Operator, who,  
as ’twill he pretended, wa?under no Necessity of proceeding in  
thetMethod. rndir; τ. ,:

......The Business of the Operation consists in two principal  
Points, which are,-first; removing the Tumor of the Ancu-  
irysin, and ofosiwards the Agglutination of the Artery, in  
*Italy,* no longer ago than the lash Century, the Practice .was to  
amputate an Arm;affected with.-an-Aneurysin, and to sear **the**-divided Arteries with an het Iton,. as appears from *Bartha list’s*History .of. an Aperrrysin., At present we endeavour to pre -  
rfervethe Adin, and cany on the Core by gentler Means. That  
the Surgeon -may he .the more ready and exacti in performing his  
-Office, he ought tcedireci his Intentions to the three [following  
Points: First, by meansofthe Tosimiquet, to stop the. Blood,  
which is a Connivance unknown- to-the Antients ; in the next  
Elace,, to find [out .and discover the Artery; and, lastly, to com-  
press and bind it fast by the Help of some Topical;Medicine.**or**, -Ligature. He mighr,, therefore,- ihefpre he enters, upon, the

Operation, to be -provided with 'all the necessary Instruments,  
.and have them ready by him, .dispos’d’in Order,.in -a Dish,  
OS on a Poaul Or Table. The commoa Apparatus.ofilrdiHi-  
-ments,-ut things necessary, is aS follows: A Tourniquet, for  
-cornpressing the .Artery-of the .Ann, andstoppingthe Blood,  
and this either a common one, or one of hetter Sored inscribed  
ninder the Article AMimTATIo), then an Inasion-keise, sor  
elayine hare the Artery. *(Tapi aa.* G); somedinaB Hooks *(Tab.*; 29. :Ag.2, 3.) ; .a Sponge dipt in het Wine, or Spirirof Wine;  
-a Pais of Sciflars, with a-blunt Point *(Tab.* aa. C:orD), Lint  
-sufficient;\_ some fmall square Bolsters 9f different Sines; a nar-  
jrow. but thick, bolster, :a Span longs two large linen Cloths,

big enough to invtipo and cover the whole Aim j and, lastly,  
two or three Fillets, of the Breadth of two Fingers, but three  
or four tones as long as those ufed about Blced ing in the Ann.  
Besides those we have mentioned, if any one chines a Method  
of Cute which proceeds by Astringents and Corrosives, which,  
however, is a very uncertain way, he must have in Readiness a  
Bit of blue Vitriol, or feme of *Wobers.* Styptic AVater, or  
Butter of Antimony, or some other thing of the like Nature.  
If you think it best to make a Ligatore upon the Artery, which  
is the surest way to prevent a fresh Hamiorrhege, and is, for  
thet Reafon, practised of late by the best Surgeons, hecaufe the  
Falsing-off of the Eschar is often followed .by a Flux of Blond,  
with great Danger of Death, provide yourself with a crooked  
Needle, threaded with a double or triple waxed Thread, or in-  
stead thereof, with a peculiar Instrument invented by myself  
lor thet Purpose (See *Tab.* 29. *Fig. 4.).*

Being furnished with all things requisite, for the Purpose, the  
Patient is to be seated in a Chair, bending forwards, with his  
Arm extended as sor Bleeding. Then four Assistants are to he  
disposed in Situations where they may he most useful and fer-  
viceable to the Operator, For Example: When the Right  
Arm is affectiS, I think it most convenient for the Surgeon  
himself to stand by the Right Side of the Patient, and to place  
one of the most dextrous of his Assistants at the Right Shoulder,  
who may lay hold of the Arm above the Tumour, together  
with the Tourniquet apply’d thereto, in order to strain it  
tighter, or relax it, according to the present Exigency, or **the**Surgeon's Word of Command. Another should he ordered to  
.stand before the Patient, and strongly to hold the Arm above .  
the Wrist, thet it may not easily be drawn back while under  
the Operation. Let a third stand .bythe Left Side, holding the  
Dish, or Table, with the instruments, and the rest os rhe Aw  
paratus.- And the fourth must stand ready, as Occasion serves,  
to furnish the Surgeon with whatever he. shall think necessary  
for completing the.Operation, in-what Order and Position the  
Operator and Assistants ought to plaed themselves, when the  
Disease affects the Left Arm, is very obvious from thePremifes,  
being only a Disposition,of the Persiam in ari Order directiy cam-  
trary to the former. .-.i.-r./nr . ' ν

The first Business .of the Operation consists in a very exaci  
Application of the Tourniquet upon the Brachial Artery*, nearly*hetween the Middle and the upper Part of the Arm (See *Tab.*.24. Try. I'. K) , which must be gently streighten’d, till no  
Eulfe remains either in-the Aneurysm itself, or at the Wrist of  
the Hand ; for this is the best Precaution we .can take against an \*  
Effusion of Blond. But, we must take care, .that the Constric-  
tion be not too hard, so as to injure the Nerves, and Other  
Sender Parts. Let .the .Assistant on the Righi Side-hold **the**Stick placed in the Tourniquet, or if the Surgeon-ch uses a Tour-  
niquet furnished with a Screw, (see *Tap.ap.* cedd 27.) It will  
remain jsixed on the Part, by that means, without further  
.'Trouble.., j. , . , ;

The Tourniquet bring thus rightly shed, there are three dif-  
ferent ways of Operation, which, we think, deserve a parucu-  
larDescription. - ‘ - -.2. .— ἐν '.sir- -so

The first Operation consists principally in passing the,Ina-  
sipn-knife, when, the Tourniquet infixed, through thewhole  
Aneurysin,, if it be a true one, from -the Bottom upwards, *ac-*. cording to the Length .and Situation of .the Artery. ; A Wound  
being thus made of sufficient Largeness, either with the Knise,  
"of oy .Scissarsf either lengthwise or .across, the Surgeon, by  
. means of his Fingers, hisTrohe^and a Sponge, is to cleanse and  
-. deterge it from all ..the corrupted Blood,,00(f Matter. . The  
Wound bang cleansed, the Tourniquet must.he a little relaxed,  
. that the. Discharge of Blood may .nisqovcr the, superior Orifice  
of the Artery. If *the* Patient he rebus,, sandifuss of Blooll. **the**. Tourniquet is not .presently χο. he streignied’inagain, hist **‘shine \***. Ounces of Blond, .as far .airs consistent|wsehSafety, piny dur  
isussefd.to stow from rye Wound. .The Tourniquet heing  
streightenin with all possible.Ομα,.Ἕ.ληγ.Τρρϊαμα thought  
'.proper,! a little Bit of .nine Vitriol, rwramt ini Lint oI,CotIofi,  
-InryTOapply’d to .the upper Orifice uf.the Artery,; and over  
this they he laid some sinall Polsters,' in ditch Order, chai tile  
least of them lying innermost, the rest increase m Size gra-  
dually in .the h'thest, iwhicir as outermost, . with good'Store Of  
Pledgets of Lint, roughly .twisted, disposed on esch Ssise; All ε  
i thefe,wince must lle well inept and .held together'with the. Rin-  
.gers, .but especiallyxthe-Thumb, jofvthessaist hand, and the  
closely compress’d upon the wounded Artery. " Instead os S, Rit  
, of Vitriol, you - may- .apply a twisted,Pledget,: exprefs’dinut of  
*. Ifsciero* Styptic Water, or. Butter of Antioiony, Io the fifetior  
t Orince of, the Anetj,. -with the samegnihetior Lssecse taking  
tosier to lay over st-evmy-one -'of the things Iirfote-mentioned.  
All these.must-hercotamil with asiperty Plaister, slltlots each  
\_Sideband, a hege.sRcede.dinister.of.I4.confidejrable Tiamkhera ;  
.and, lsstly,jthe **Whole.'**roust be eogornpafs’d, and bound.**up,**.wishsa 'Flint three .or soar rimes as segeamtspse.whictitate  
: commonly used in Phlebotomy. Theseμπέο follow .Dainty,  
perform..the Bandagein stinh a manner, than, omining the Vi.  
vtriol, they sash apoly a Bis orinwo of.chesv’4.Paper, cradinall

Bolster moistened with some Styptic Water, over which they  
bind a Multitude Of sinall Bolsters, one still larger than another,  
like those we have mention’d, upon the open Orifice Of the  
Artery ; and this Method may sometimes well enough answer  
the Purpose.

But for the better Security against an Haemorrhage, over the  
first Fillet must he brought another like it, which, **after some**Windings, like the former, about the assectid Part, is to pass  
over the long, thick, and narrow Bolster, upon the Inside of  
the Arm, in order to strain it clofe to the Brachial Artery, in  
the Line Of its Direction, and keep it tight, by passing over it  
**as** it winds upwards ; and thet this Fillet may hold **the faster,**it should go once round the Breast, and have its End firmly  
fasten’d to the Shoulder or Arm, and then the Patient is to he  
left to his Repose. Having proceeded thus far, and the Tour-  
niquet heing a little relaxed, we arc to examine whether any  
Blond has made its way through the Bandage ; and if no Sign  
thereof appears, the Operation is well performed.

If any Blond appears, the Tourniquet is again to he straight-  
ened, and all the Bandage being loosened, either the Ligatote  
is to he renewed in the fame manner as before, and with all  
imaginable Care ; or if there he no trussing to so uncertain **a**Method of Cure, the Extremity of the Artery, agreeably to the  
Advice of *Paulus Asgineta,* is to he skilfully ryd, by pasting un-  
der it a crooked blunt Needle, and a strong double Thread; for  
there is fcarce any other Means left to save the Life Of the Pa-  
tient. But here are two things necessary to he Observed, which  
are, thet the Surgeon be very careful, in the first place, to  
avoid hurting the Artery; and, secondly, thet he he no less  
wary, lest he should hurt Or prick the Nerve that lies near it.  
For this Reason it will he most advisable to make a sufficient  
Incision in the upper Skin, and with a sinall Hook, as exactiy  
as may he, to remove or loosen the Nerve from the Artery, if  
it he possible; aster which, to avoid wounding either of thefe  
Parts, you are to pass the blunt End of the Needle, which they  
cull the Head, under the Artery, till you can take held of **the**Thread, thet you may not hurt the Artery with the sharp End  
of the Needle; or *yws* may make ofc of thet peculiar Instru-  
ment of my own Invention (fee *Tab.* 29. *Fig.* 4.) ; which,  
after you have pasted the Thread sar enough through it, and  
cut it, may he withdrawn; and the superior Orifice of the  
'Artery must he ty’d up, after laying upon it **feme Lint, or a-**little thin linen Bolster, and the Thread should he lest to hang  
the Length of about sour Fingers Breadth out of the Wound,  
till, as the Artery heals, it loofens, and falls off. Some advife  
the tying alfo of the lower Part of the divided Artery, but other  
Surgeons hold it ahfurd, needless, and even pernicious ; and  
' indeed in fome Circumstances, as when the Flexure of the Cu-  
bit is concern’d, they are much in the Right; sor in this Cafe **a**much greater Wound and Cicatrix is to be made, either of  
-which may easily endanger a Stiffness of **the** Cubit. But if **the**Aneurysm in the Ann be out of the Flexure of the Cubit, and  
'particularly below the Cubit, and the lower Part of the Artery,  
‘ after the siiperior is ty’d, continues to bleed, it may he ty’d  
.. without Injury, and even , ought to he ty’d. For Instance, in  
'the Cure of an Aneurysin of the cubital Artery in the Middle of  
the Arm, thet is, betwixt the Hand and the Flexure of the  
Cubit, aster I had ty’d the upper Extremity Of the wounded  
*t* Artery ; and the lower, the Tourniquet being loosen’d, still  
continued to discharge Blond in a considerable Quantity; I ty\*d  
it up, bypassing under it a crooked Needle, with a strong  
Thread, and the Patient, who was near Death, perfectiy  
recover’d his Health, without any ill Accident, by the Help of  
' balsamic Medicines. Wherefore, if there happens a Necessity  
. of tying the Artery near the Cubit, it must he ty’d ς otherwise  
it must he well compressed with Bolsters, and a convenient Li-  
gature ; for by this means, without tying, I have perfectiy  
'cured the Wound of the lower Part of the Artery, without the  
least Effusion of Blond., It is the Custom with some, after  
tying the Artery, to cur it across just under the Ligature, with  
' a View of preventing Effusions of Blond, as the two Extrahi-  
ties of the divided Artery, retiring within the Flesh, are by this  
means olofed up. Ext I look upon this Method as pernicious,  
or at best insignificant) and I myself have twice undertaken  
the Operation, without cutting the Artery, and yet my Patients  
- did *very* well.' As to the rest, the Wound must he well filled  
'up with Lint and Rags, or with Bolsters closely compress’d  
together, and afterwards bound up in the most exaci and **skil-**. fill manner.

Some think it Dot amifs, in order to prevent an Inflam-  
mation, to wrap thefe Parts of the Arm which are near the Cu.  
. bit on both Sides, in Linen dipt in Oxyctas, and over thet to  
make a spiral Bandage, and sometimes to **take away** Blond from  
1 the opposite Arm. This is a good Precaution with respeol to  
- Persons of a hut Temperament, and full of Blood : But for  
such as are already refrigerated, and debilitated, with too great **a**Profusion of Blood, the taking away of more, tho\* recom-  
. friended by the *French* Surgeons without any Exception, and  
' the Application of Refrigerants. **are** destructive ; for **I have  
\* cured siich, without taking away a Drop of Blond and in cold**

Habits of Body; instead of Oxycras, *or* Vinegar, have taken  
care to foment the Arm with hot Spirit of Wine camphorated,  
or impregnated with Theriaca, and fo I have bound it up.  
When this is over, the Panent must he put to-hed, and his  
Ann, gently bent, should he laid on a Pillow, thet it may rest  
on a soft Place, and by thet means' all vehement Sallies *and* Pul-  
sations of the Blond may he prevented; for Rest in this Case, is  
highly necessary. However, if the Arm happens to swell ex-  
trernely, we must he very cautious, lest a dangerous Inflamma-  
tion should he occasion’d by the Streigbmess of the Bandagej  
for if any fuch thing he apprehended, the Bandage is to he taken  
off, and renewed. But upon Other Accounts we are not easily  
to he prevailed upon to loosen the Bandage, for fear Of an Ha—  
nrorrhage ; for I know, by Experience, that in thefe Cases the  
Anns can bear to swell to a very great Degree, and even till  
they tom livid, without any considerable Injury, provided the  
Tumor be not too hard and painful, and there he no Signs of  
**a** Gangrene.

But to secure the Patient from being exhausted by a sodden  
Effusion of Blond, which may easily happen, when Astringents  
and Corrosives have been used, or in case of a bad Ligature, a  
Person provided with a Tourniquet should he order’d to watch  
for feme Days and Nights together, whe, if an Haemorrhage  
should happen, may he ready to flop the Blond by applying his  
Thumb, or soon restrain it by clapping on the Tourniquet; and  
then call a Surgeon to make a Ligature on the Artery, if there  
were none hesore, or a hettcr and stronger one, where it had  
been ill made, thet the Patient may not perish by the Loss of  
Blond ; on which Account, it is, m my Opinion, safer to tyc  
the Artery, than to leave it unty’d ; a Ligature therefore  
should he made upon the Artery at first, with a strong Thread,  
as accurately as is possible. Wherefore thefe Surgeons are not  
in the Wrong, who pass a triple Thread under the Artery, and  
leave One of them loofe, in order to he serviceable upon siich  
an Emergency ; and,, that, if the Other two are nor sufficient,  
they may tye it up afresh with the third Thread.

Now the first Bandage, provided it he sufficiently firm, if  
there he no Effusion of Blood, great Inflammation or Tumor,  
Or any other ill Accidents of thet Kind, ought not to he loos’d  
till the third or fourth Day, thet the Wound of the Artery may  
he the hetter conglutinated. But when it comes to he loosed,  
the Surgeon ought to take all imaginable Cate, in the fust  
place, thet the Artery he compressed, either by the Assistant’s  
Fingers, or by means of the Tourniquet, and next, that the  
Compresses which stick to the Place, and especially those next  
the Wound, he not iniprudentry taken off, and so occasion **a**new Effusion of Blond. The Woand, however, as sar as is  
convenient, ought to he cleansed from Sordes, and to he dress’d  
with fresh Lint, and some digestive Ointment, till whatever  
adheres to it resolves of itself, and comes off in the rest of the  
Dressings. But it is by much the safest Way not to he too  
frequent in loosing the Dressings for the first fifteen Days, and  
then always to observe the same Precautions as I just now ad-  
vised, lest some extraordinary Effusion of Blond, especially if  
the Artery he not ty’d, should Occasion **a** fresh Trouble to **the**Operator.

But if within a few Days after the Operation there he an in-  
tense Heat, with a quick and vchement Motion of the Blond,  
that is, a Fever, which may endanger an Hemorrhage and  
Gangrene, we are to have immediate recourse to Phlebotomy  
in the other Ann, which is sometimes necessary to he renew’d,  
cspecially in fuch as abound with Blond, and Medicines are to  
he prescrib'd for assaying the Heat. As to Diet, the safest way  
is to avoid all heating, hard, and solid Meats; and, on **the**contrary, to subsist on very thin Broths, and sorbile Food, very  
much diluted and refrigerating, and siich as is usually prescrib’d  
in dangerous Wounds and Instammations-

As soon as the Orifice of the Artery is thus closed, which,  
in Aneurysins of the milder Sort, generally happens about the  
tenth or twelfth Day, but later in others which are os a worse  
Kind, we are to *fet* about conglutinatiog the external Woand  
with dry Lint, Or some vulnerary Balsam, not omitting every  
now and then gently to extend the Arm, and bend it hack  
again; for without this Precaution there is Reason to fear left  
the Arm, by the too great Sttictirre from the Gcatrix, or the  
too long intermitted Monon Of the Joint, should bteome  
crooked and inflexible.'

Another Method of curing Aneurysins is aster the following  
manner:

The first Step which is made, is to place and adjust the  
Tourniquet, and put the Arm in the Situation above describ'd.  
Then an Inelfion is made in the outer Skin, without touching  
the Aneurysin , then the Artery, above and below the Tu-  
mor, is carefully separated from the adjoining Nenes, and by  
Help of **a** sinall Hook is so raised, that **a** crooked **and** blunt  
Needle, or my Instrument before-mentioned with a double  
waxed Thread, may pass through under it. In straining this  
Thread there is always a little Bolster, or Bit of linen, under  
the Knot, to save the Artery from being cut. The Artery he-  
ing thus ty’d on both Sides, the Tumor situated between is

open'd with the Incision-knife, and the Wound treated in **the**manner besore-rnention'd. This was the Method by which  
*Purmannus,* as he relates it himself, extirpated a most dreadful  
Aneurysm, (see *Tab.* 3a- Fig. 6.) and healed the Wound in  
the Space os a Month.

The third Method of curing a true Aneurysm, is as follows:  
- First, the Tourniquet is fixed on; next, after pressing, if pos-  
sible, the Blond out of the Tumor down towards the Hand,  
an Incision is made with the Knife in the outer Skin length-  
wise, without touching the Aneurysm; then the Artery next  
above the Tumor heing separated from the adjacent Parts,  
and especially the Nene, is ty'd with a double or triple Thread,  
once or twice, aS Occasion shall require, till the Influx of the  
Blood into the Tumour, aster taking off the Tourniquet, he  
wholly flopped. This done, the Wound must he Very sail-  
stilly hound up, and treated with all due Care, till the Thread  
loosens of itself, and salis off, and the Place is perfectly eon-  
glutinatedl This Method of curing without inflicting any con-  
iiderable Wound, or causing a remarkable Cicatrix, was intro-  
duced by *Anelius,* as he says himself, by which he once cured a  
very dangerous Aneurysm at *Rome,* within the Space of a  
Montis. For as to the general Practice, which has hitherto  
obtained, os laying open an Aneurysm, and with the Help of  
the Fingers or Instruments, exhausting all the Blood there col-  
lected, seems more inconvenient, both aS it requires more Time,  
and occasions greater Pain, and a larger Cicatrix. The Ope-  
ration heing finished, *Anelius* blooded the Patient four times in  
the opposite Arm, winch the *French* Surgeons in general also  
prescrihe.. This frequent Bleeding, aS it is oftentimes of singu-  
lar Service in tempering the Heat and Motion of the Blood in  
those warmer Regions, so in our Countries, because of a colder  
Ain, and a different Habit of Body, I judge it less necessary,  
and generally improper, especially when the Patient is already  
weaken'd; and also because some Aneurysms are Very well  
**. cured** without it. \*

If a Tumor of an Artery, aS I have sometimes observ'd it,  
should break of itself, and degenerate into a spurious Aneu-  
rysm, there is scarcely any sure way to save the Patient, but  
by the Operation, in this Case therefore, as I have elsewhere  
advised, the Tourniquet is first os all to he apply'd, for the Pre-  
vention of an Haemorrhage ; after which an Incision is to he  
made in the Skin, deep enough to exhaust all the Blood and  
Matter; and the Wound, having been very carefully deterged,  
is to he cantioufly conglutinated by Astringents or Corrosives,  
or, which is much the hetter way, by tying the Artery **with a**Thread, asina true Aneurysht. ' .

If the Brachial, or Cubital, or suppose the Tibial, Artery,  
should he wounded or Cut by a Sword, or any other Wea-  
pon, so that no Medicines or Bandage can put a Stop to the  
Effusion of Blood, there is no readier or better Remedy, in my  
Opinion, than what has heen proposed for an Aneuryfin, which  
is, to apply the Tourniquet, and then search for the wounded  
Arteries, the smaller of which may he stopped with Astrin-  
gents, and the larger ty'd with Threads, in the manner already  
described; for by such Means I myself have often saved Men,  
who, in all Appearance, were near expiring, after they had  
heen almost totally exhausted of their Blood and Strength, and  
had been under the Hands of other Surgeons for ten and twelve  
Days, and heen treated in vain with Styptic Remedies, and  
extremely bard Ligatures, by which their Arms were swell'd to  
an enormous Size. Whether such Methods will, at any time,  
succeed upon the Crural Artery, I have never read, nor as yet  
**had** an Opportunity of trying.

Aneurysms in other Parts are to he treated nearly in **the**same Manner, provided they are curable, which must he de-  
termin'd from a thorough Inspection and Consideration of their  
Place, Situation, and Magnitude. However, it will not be  
amiss to touch upon some Particulars, for the sake of young  
Practitioners, and because our modem Surgeons have offer'd  
little er nothing about them. The first I shall mention is an  
Aneurysm, winch arose between the Thumb and Fore-finger,  
from the Prick of a Penknife, and which *Tulpius* cured by  
Compression. To this he apply'd an astringent Plainer, and  
sustain'd it upon the Part, by a thin Plate of Lead, and  
Bandage; and within the Space of four Months, the Blood be-  
Ing expelled out of the Tumor, and the Lips of the Wound  
drawn together, **the** Aneurysm totally Vanished. The **line**Compressare may he trsid upon any Aneurysm whatsoever,  
especially whilst recent, and of no extraordinary Size, first  
repressing the Blond into the Artery, whenever it can he done.  
Our second Instance is of an Aneurysm in the Head: A Wo-  
**man** struck her Son, seven Years old, a smart Blow with **a**Stick on the Left Side of the Head, where the Carotid Artery  
passes; immediately there arose a heating Tumour, aS big aS a  
Haste-nut, blackish at first, and yielding to the Touch, which,  
in the Space of eight Days, grew to inch Dimensions, as to  
**take** .up one half of the Head, extending itself from the Sagittal  
suture, along the Temples and Forehead, as savas the Eyes.  
Upon a Consultation of Surgeons it was agreed, that a dubious  
Remedy was better than none in a desperate Case 5 in Conse-

**quence of winch they open’d the Tumor wish the Incisioat-**knife, and taking away part of the Blood winch was discharg'd '  
abundantly, closed up the Wound with Astringents, and **a**tight Ligature, and healed **the** Patient **in a** short **time.** As-  
ter the same manner was an Aneurysm of the Artery behind  
the Ear, not without a great deal of Trouble, conginfinared at.  
last by Astringents and a Ligature If an Aneurysm should  
arise about the Ankle-bone, such as *Ruyseh* describes, and  
which the Surgeon had imprudently open'd aS an Abscess, it  
must either he laid open with the Knife, and the Wound, like  
the preceding, consolidated with Astringents, and a proper Jin-  
gature; or the Artery must he search'd out, and ty'd up with  
a Thread. In the same manner are we to proceed with Aneu-  
rysms in other Parts of the Body, where there is any Prospect  
of a Cure. On the other hand. *Harder* gives an Instance of  
Death consequent upon opening an Aneurysm in the Neck ;  
and *Fan Horne* has another winch was follow'd by **the like**Event, from opening an Aneurysm in the Leg.

Those who are wflling to form to themselves a clearer Idea  
of the Ligature of Arteries in Aneurysms, may consult *Tab.* 32.  
*Fig. I.* where the Letter *A* represents the Part of the Artery-  
situated above the Tumor, *B* the Part beneath, *C* the Aneu-  
Iysin, *D* the superior Ligature, *E* the inferior. But here it is  
to he observ'd Once more, that the lower Part of the Artery  
in the Flexure os the Cuhit ought very rarely to he ty'd, ex-  
cept Necessity requires it, for the Reasons above given. TO  
draw m a Conclusion : How the Circulation of the Blood in the  
Arm is perform'd aster an Operation of this Kind, especially  
where there is but one Trunk of an Artery, as it often happens,  
about the Joint; and how it comes to pass, that, as in the  
Example alleg'd by *Anastus,* the refluent Blood in the lower  
Artery, which has no Ligature upon it, is not elevated into **a**Tumor; I have not hitherto been able clearly to determine.  
To he satisfy’d in these two Points, we ought to make a more  
narrow Search into, and inspect the dead Bedies of those who  
had undergone this Operation when alive. *Harris,* an Aqg-  
*lijhman,* in his eighth Chirurgical Dissertation, absolutely con-  
demns this Operation, and does not stick to call it a rash and  
horrid Butchering; but for whet Reasons, is best known to  
himself. In my Opinion, that Surgeon, who, out of Fear,  
rejects the most difficult and noble Operations of his Art, be-  
trays too much Pusillanimity, which is too often a fatal Obsta-  
cle to the Recovery of the Patient. *Hassler.*

The following Cases, from the *Edinburgh Medical Essays,*will illustrate the Treatment due to an Aneurysm.

**CASE I.** *By Me.* **MACGILL.**

*. James Forrest,* a Coachman, forty Years of Age, a hail,  
strong Man, being thrown from the Coach-box, broke **the**Bones of his Right Leg into a great many small Pieces; and a  
Gangrene coming soon on, there was a Necessity to perform  
the Amputation in the Country where he then was. The third  
Day after this Operation he was let Blood by a young Surgeon  
there, who opened the Basilic Vein of the Right Arm. The  
Patient felt a very sharp pricking Pain, while the small Incision  
was made with the Lancet; and four Days after he observed **a**Tumor, about the Bigness of a small Cherry, at the Wound,  
which he believed to he the Common one of coagulated Blood,-  
called by Surgeons Thrombus, and therefore did not mention  
it to the Gentleman who performed the Amputation.

On the twelfth Day after his unfortunate Fall, he was car-  
ried to Town, and received into the Infirmary, where the Cure  
of his Stump went on as well as could he wished, without any  
Accident or Symptom to retard the Cure. After he had been  
eight Days in the Hospital, he told the Physician and Surgeon  
then attending, that he had some Uneafiness from a Swelling  
at the Bending os his Elbow. When it was examined, a Tu-  
mor appeared of an oval Form, as big as a small Hen-egg,  
situated behind the Basilic Vein. The Skin over this Tumor  
was os a natural Colour; no Pulsation could he felt, and it  
adhered aS firmly to the Tendon of the Biceps Muscle, as  
Ganglions commonly do to Tendons. Two Days after, **a**Pulsation exactly synchronous to that of the Arteries, was  
distinctly seen and felt. When the Tumor was strongly pres-  
sed, it seemed to he less, het could never he made to disappear.  
There was scarce any Pain at this Part, either in moving his  
Fore-arm, *er* when the Tumor was handled.

A Consultation of several Physicians, and of all the Surgeons  
who attended the Infirmary, being called, the Disease was una-  
nirnoufly determined to he a true Aneurysm ; but the Patient  
being still weak, it was resolved to try the Effects Of artful  
Compression, and to delay the Operation till the Patient had  
Strength enough to undergo it, unless the Tumor seemed be-  
fore that to he in Hazard of Bursting. Graduate Compresses,  
wet in Oxycrate, were therefore applied, with the proper  
Bandage, **winch at** first had an exceeding good Effect in di-  
minishing the Tumor, but it soon after began again to increase;  
and then several Machines, fitch as that with a Screw sor the  
Fistula lachrymalis, Mr. *Petits,* Tourniquet, *etc.* were used,  
**but without airy Success; on the Contrary, the Tumor still**

increased, and the Skin began to inflame ; and a final! Suppu-  
ration was brought on the most .prominent Part of in. By  
hying, aside thofe more forcible Machines, and returning to the  
Use of the former Compresses and Bandage, after covering the  
finall superficial Ulcer with white Ointment, the Inflammation  
went off, and the Ulcer *peso cured.* The Tumor was now all  
firm and hard, scarce yielding at all th Pressure, except at that  
prominent Point where it was soft, and where only the Pulia-  
tion could he felt, when the Fore-arm was bended ; when the  
Member was extended, no Pulsation could he observed any  
where in the Turnon. .

The Patient was not yet sufficiently recruited, and therefore  
the Operation of the Aneuryfm was still delayed; but to pre-  
vent any Danger from the sirdden bursting of the Aneurysm,  
the Tourniquet was kept constantly applied to the Patient’s  
Ann.:............. ,

In the Beginning of *January syisa* **the** Patient wasjodged  
to he strong enough to suffer the Operation, and the Tumor  
.increased so fast,-that there was great Danger of the Teguments  
yielding suddenly, and therefore the Operation was not to be  
delayed any longer. This happening to he the Month of my  
Attendance, I..was.of courfe to perform; but previoufly  
brought all the Surgeons of **the** Hospital together, to examine  
the State of the Tumor, and to determine the Methed to he  
followed in operating. \_ , ...

.. The Tumor was of a very great .Bulk-and Height, its Base  
extending internally.as far as the internal Condyle of the Hume-  
ral Bone, and externally it had pushed the Tendon of the Biceps  
Flexor Cubiti, as far as the Cephalic Vein ;. it asijcnded about  
three Inches along the internal Side of the Biceps, and deseended  
2s, far below the Joint of the Elbowi heing alfo considerably  
prominent forward.;, : .. . ... . ... 4

.\_ Being .uncertain whether this Tumor was formed without  
the Artery, or if it,was the Bndy of the Artery dilated, we de-  
termined to do the Operation in'the most; cautious, tho’more  
tedious way, *viz.* .-by Dissection, havingallo all the Instruments  
and Dressing for an Amputation ready, in cafe there was no  
slope of Success from the Operation of the Aneurvsin., ; -.  
μ Havingapplied the Tourniquet in .the common way rd pre-  
Irene-any Haemorrhage, the Skin was pinched up about, the  
Middle of the Tumor, and cut with a Bncery.s then a sinoll  
Lbredinry being pushed,into the sat cellular Membrane, first  
upwards,, then downwards, and to cacti Side, I cut upon it  
wjthra Bistory, and thus .made a.crucial Incision on the whole  
Extent of the Tumor. After which I disscAed the four Angles  
of the Teguments from the Tumor; -with a convex edged  
Scaspel, -shtctiing,a .cutaneous Artery,'jthat would otherwise  
inyeineen uneafy to nle...The-Tumor, thus laid bare, appeared  
coveressat its upper Part, with a thin cellular Membrane, , but  
perowdinTeemed, to have, a very .sinong tendinous-like Chet,  
which .sec foon .dimovered to be no other than the Aponeurosis  
Psthe Biceps Mufcjeκ*J!&es.*separating the. Adhesionchisbadto  
thisTuinor helow.it.with *my* Fingers; I cut is through tothe  
lowest. Part ofthe Alleurysin, which ;nowyras all bare, and full  
inView. The float of It was only 4 very thin tender Memc  
bnine;:whith appeared graded, as we ll tat t he firm Substance it  
contained, at that prominent softFart, vvhere, as lmentioned  
infore, ;the Pulsation only was to be seltio In endeavouring; rd  
separate the Tutnor.frorn the,adjacent Tarts with my singer,  
ins-render Membrane was easily -.torn in several Places; and  
.therefore,- without insstingonfucht a .Separation, Lopened.the  
Membrane -from one End to the other, when several Ounces of  
st blackish grey-coloured Liquor, llke io;Cossee made of hass-  
.umt Beans, ran out, and several Pieces oLcoagulated.grumous  
Blood, .and of polypous Concretions, sell down to lie Floor:.  
.What remained was one. large polyposjike Substance, /that  
weighed; fix Ounces, below which; forne Spoonfuls of that  
llacinsh. Liquor, mixed with pretty pure -Blond, wine taken  
ioin with a Sponge.. **-There.were no** bridles Or fleshy Beams  
dinetdjed^tranfverfly .from one Side Of i the Cavity, to the other,  
/.ofthe Humeral Artery, involved in all its Coats, came fullyin  
VinwherAheutjdur Middle of the bare. Part of the Artery , we  
saw a Hole, large enough to receive .the largest Surgeon’s Probe,  
without any retorted Lips, or other; Signed. the interior Mem-  
brands .having been extended through-the exterior, but intactiy  
of the fame Appearance, as if It hail been made by an oval  
sharp-pointed instrument. After .by unloosing the Tourniquet  
shade,-we made sure of whatwetiow, being the wounded  
Artery, one of the Gentlemen who insisted Inc. put in a strong  
Trohe by the Ounce, and with in raised the Artery so, that I  
easily pulsed the Aneurysm Needle, with proper.Thread, her  
hind; the Artery, heth above and helow the Orifice, without  
engaging the Neryeisrr Vain within the Thread- I made.the  
amo Ligatures in the. common,way, the patient complaining  
much of Pain,, .while I tied the superior Threads; and then  
untwisting, the Tourniquet, only isome sew .Drops.of.-Blood  
loused out at; the Aperture in .the Artery, and rhe νη-her corn-  
**won** Dressings and Bandages were implied. ced.3ISV-.sced - -:.. i  
i The polypous Lump **we** took **our, wasvery haul andrsinnron**the Side -next to the Skin, except where, I said already, it was

eroded in the Middle; but turned softer, **in a** lamellated way,  
as it approached the Artery, till it degenerated gradually into  
mere coagulated Blood.

During half an Hour, after the Dressings **were** applied, the  
Right Hand remained cold, and scarce feasible, but gradually  
then recovered Sense and Heat. Next Day, that Hand was **a**little swelled; and on the second Day became so big, as to ob-  
lige me to take off the thick Compress, thet was pressed on  
the Humeral Vefleis bj. the exterior Bandage, after which, and  
fomenting the Hand with warm Water and Brandy, the Swel-  
ling decreased.

On the fifth Day after the Operation, the Dressings were  
removed, and the Wound began to suppurate in a very right  
way, and was cured enurely before the End of *March,* with-  
out any Accident, unlefs that on the 2nd of *January,* Blond  
made its way throughall the Dressings. It had come out from the  
Hole of the Artery, but stopper as soon as the Dressings were  
removed ; and no Haemorrhage ever happened afterwards. In  
the Time of the Cure, the Hand often became cedematous, and  
somenmes a gentle Erysipelas attacked the Skin of it, hut soon  
yielded to an Embrocanon with the Aqu. Minderi, or to  
Aqu. Calcis, with forne Brandy. The Threads with which  
the Artery had been tied, did not come Out till the Middle of  
*March.*

We never could feel any Pulse below the Elbow since the  
Operation. The Member is weak, but he can perform the  
Motions of the Fore-arm, Hand, and Fingers. He still com-  
plains of a Numbness, and Difficulty of Motion, in the Thumb  
and Fore-singer, more than in any of the rest, tho’ it is now  
two Months since the Wound was skinned over. *Edinburgh,  
Mad. Esse. Vol. 2..*

CASE Π. .By *Mr.* Monroe.

*Andrew Rady,* living in *Gallaway,* had the Misfortune, rh  
being bled in the Basilic Vein of the Right Arm, by some  
Gardener there, to have his Artery hurt, which was followed  
by ah Aneuryfm. Somewhat more then aYear after, he came to  
Town here, and was received into the Infirmary in *May so An*On the *220* Day of that Month, MI. *George Cunningham, the*Surgeon then in Attendance, performed the Operation. After  
the Tourniquet , was applied, Mr. *Cunningham* laid open the  
Tumor from one End to the other, with one longitudinal In-  
cision ; then taking out'the polypous Substance, and a fmall  
Quantity of liquid Blood,'the fmall Aperture of the Artery  
was so plainly seen, that I -put a Prohe into it, and raised the  
Trunk of the Artery, while he passed the Needle hehind’ it,  
.the Sides of the Woiind being held asunder, in the mean time,  
by two blunt Hooks. . The proper Membrane of the Ttimor  
was considerably thicker and stronger, then in *Tames Forreseso*Aneurysm, and required Forde to push the blunt Aneuryfm-  
needle through itshut theNerve was pressed by the Tumor a  
good way. from the Trunk of the Artery, fo that there was no  
Danger of brining the Nerve within the Ligature. Aster make,  
jog she superior Ligature, the Tourniquet was untwisted, buf  
no Blood, came by the Orifice, which shewed the Anastomosing  
.Canids io. he very finall. . The fecond Ligature was however  
poadethelow her Orifice for Security, dine Cavity was .filled  
witlsherLam, and the other ordinary Dressings applied! Thai  
Afternoon his Hand swelled, and became warm, which removed  
all out. Fears of .the Circulation being entirely stopped. No  
Pulse was to he felt on either Side of the Wrist for “several  
Days; hist before the 5th. of *Iscne,* when both the Ligatures  
juppurated off, the Pulse was plainly to be felt on both Sides .of  
.the Wrist, and he was soon cured, having as much Strength  
and Motion in that whole Member as ever, *t*  ' ’ 7 si  
. To make this Operation-more spcedy and safe, I would *prot  
pose, tint tat soon* as thelorigitudinal Incision is made, and the  
Polypus with the Blood is-renamed, the Patient’s Eshow being  
bended .some way, the Operator should take-bold of the Hu-  
jmeral Artery with the. Thumb - and Fore-singer of the' Left  
Hand, and, griping it towards ’the Bank -part,: should push the  
Needle olofe upon his oam Nails, hy which'he has a shreThe  
rection whereby he rnry stain the Nerve, which’ he cast readily  
distinguish-from the Artery by feeling, and can, in that  
Tostute.os the Arm, easily .draw the Artery so fir outwards  
as to kamp.free of the Nerve,/:: i  
j Ther-Opexatinn then’of the Anedryfmi which appeared by  
the Description Surgeons gave of it, to he very nice, difficult,  
tedious, and precarious, may he done easily, quickly, and safely,  
by opening the whole Tumor at once, and then nutting’the.  
Ligature ubamt the Arolrys. in just now defcribed. *Ediaburgul  
seAnd. Ljsi ficdi^.* u amssdur. 6 . . \

As, it may: he agreeable to the Reader to know the precise  
Methed generally pursued in out Hospitals; T shall add IVLr.  
*Sharpsis* Account of it, as follows; .." . ~

herving applqui .ike Tourniquet near the Shoulder, andthrd  
the Arm in ja convenient Situation, make an Incision ain the  
inside.of the. Biceps Muscle, above and below the Elbowin\*co&.  
sideruble Length, which being in the Course of the’Artery,' will

discover it as soon as you have removed the coagulated Bleed,  
which must he all .pulled away with the Fingers, the Wound  
being dilated sufficiently sot.that Purpose: If the Orifice does  
not readily appear, let--the Tourniquet he loosened, and the  
Esmsion of Blood will direct you to it; then carefully carrying  
a crooked Needle with a Ligature under it, tie the Vessel just  
above the Orifice, and passing the Needle again, make a second  
Ligature below it, to prevent the Return of the Blood, and  
leave the intermediate Piece of the Vessel to flough away, with-  
out-dividing it. ..To avoid wounding, or tying the Nerve in  
making the Ligature, the Artery may he cleared away from it'  
first,, and held up.with a Hook; but, I think, if we are aware  
of the Situation .of the Herve, there is no great Danger os  
hurting it.. After the Operation,, the Ann must he laid easy,  
on a Pillow in Bed, and the Wound he treated in the com-  
mon Method, Leeping it in that Posture \*a Fortnight, or three  
Weeks, especially; if .it should swell much, and not digest  
kindly. .. : *v . .so . ’\**

- In doing this Operation, if will he proper to have the ampu-  
tating Instruments ready, lest it should he impracticable to tie  
the Artery; and eVen after having .tied it, the Arm must he  
carefully watched, that in case: of a Mortification it may he  
taken off,- which though from Experience we learn is Very  
seldom the Consequence, should, to all Appearance, he the per-  
petual one: For these Aneuryfms following always upon bleed-  
ing, the Basilic Vein, must necessarily be Aneurysms os **the**Humeral Artery, an Inch, at least, above its Division, which  
being obstructed by the Ligature, one- would think, must ne-  
ceflarily bring on a Mortification; but we see the contrary, .  
tho’ for some time after the Operation, we can hardly distin-  
guish the least Degree of Pulse, and ever after they continue  
languid. If the Humeral Artery happens to divide above **the**Elbow, which is not uncommon, the Prospect of Cure is better,  
and the Pulse .will he stronger after the Operation. *Sharp.s  
Surgery.. ' ' .*

- It is to he observed, that *Heistcr* esteems the inferior Liga- .  
turn of the Artery generally superfluous, and often pernicious,  
as is specil/d above. - .

.’ ANFAKA, a Coagulum. *Rul. Johns.*

ANFIR-FILIUS, Mercury.. *Johns.*

. . ANFIRART0-SPIRITUS,. halfr. *Idem. - - '*ANGEILOGIA, Ἀγζβολογία. See **ANGIOLOGIA\* .**

- ANGEION, Ἀγίἐῖον, a Vessel See VAS. S  
.... ANGEIOTOMIA, 'Αγζέώτομία, from ἀγζεῖβν, a Vessel,,  
and τέμνω, to cut. A Dissection of the Veflels, as in Phlebo-  
today and Arteriotomy.' It alfo imports a particular Dissection  
of the Vessels for Anatomical Purposes. See **ANGloLoGlA.**

ANGELICA, a Plant thus called, of which *Dale* enume- '  
rates four Species. The first is,  
**. ANGELICA,** Offic. Chain 400. P. Pared. 529. *Angelica  
saliva,* C. Βἰ Pin..I55. J. Ε. .3. I4o. Ger. 846. emac.  
999. Park. Theat. 939. Raise Hist. I. 434. Synch. 3. 208.  
Boerh. Ind. A. 53. Rupp. Flor. Jen. - 222. Phyt. Brit. 8.  
Mer. Pin. S.\_ Mor. Umin 9. Hist. Oxon. 3. 280. *Impera-  
toria set iva,* TourIL Inst. 3I7. Elem. Bot. 267. ANGE-  
LICA.

This is one of the greatest os the umbelliferous Plants;  
its Root is large; thick, and branched, running deep in the .  
Earth, from which arises one ..large hollow round Stalk,  
a Yard and half, or two Yards htgh, spreading out into  
many Branches. The Leaves are large and winged, divided  
usually into three Partitions, or lefler Wings, each single Leaf  
being serrated, or indented about the Edges. On the Tops of  
the Branches grow large round Urnhels, of small five-leaved  
white Flowers; the Umhels, as the Seediripens, grow out into  
large globular Heads, bearing the Seed at the Ends, which is  
large and thick, striated, or furrowed pretty deep, of a whitish  
Colour, two Seeds bring joined together, as in other umhelli-  
serous Plants. Both Root, Stalks, and Seeds, are of a grateful  
aromatic Savour. . It grows in Gardens, and flowers and seeds  
*in June* and *July,* the Root perishing after the ripening of  
the Seed, which is the second Year of its springing from the  
Seed. - )........ .. . ..  
*- Angelica* is a Plant of many Virtues, being Stomachic, Cor-  
dial, Aleaipharmic ; of great Use in malignant pestilential Fe-  
vers, in all contagious Distempers, and the Plague itself: It  
causes Sweat, and drives out all noxious Humours through **the**Pores of the Skin. tit is Very useful in Disorders of the Womb,  
.. and Hysteric Affections; it provokes Urine, and the *Catamenia,*and expels the Secundines. The Roos, Stalks, Leaves, and  
Seed are used.

- Officinal Preparations of *Angelica* are a simple and compound  
Water, and the Stalks candied. *Miller Bot. Offe .*

\ A Spirit of it cheats the Heart, and revives the Spirits to a  
. Miracle. The Chemical Oil operates powerfully in all inten-  
tions. Besides which, it cures Palsies, Apoplexies, Convul-  
sions, Cramps, and Rheumatisms. *Pometc*

in is said to he good for the Bite of a med Dog, aqd for the  
Scurvy.

*Paracelsus* boasts, that at *Milan,* in the Year I5IO. he did

little less than Miracles with this Plant in' the Hague. And its  
Virtues in this terrible Disorder are confirm’d by a Multitude  
of Authors. It is also esteem'd an excellent Pectoral, and  
hence has been called *Hirba Pectora ria.* The inspissated Juice  
of Angelica is said to prevent Putrefaction of the Gums, and  
Rottenness of the Teeth; and the -ChyrnistS agree, that the  
Quintessence of Angelica is the greatest Restorative and Car-  
diac in Nature. Angelica is farther recommended for the Le-

sl^he Stalk of Angelica sends forth a Very agreeable Smell, the  
Seeds of it a different one; its Roots are more aromatic than  
any of these Parts, and its Parenchyma is filled with resinous  
Vesicles. It is very subject to he destroyed by Worms, which  
prey upon the Parenchyma, and leave the resinous Parts unco-  
vered. This same Observation holds good in Masterwort, Gin-  
ger. Fennel, and in the Roots almost of all umbelliferous Plants,  
*Memsires de sAcad.* I72I. *. 's*

*' - Aromatic volatile Salt of Angelica.*

Take of the fresh small Roots of Angelica, dug up in *Febrssu  
ary,* two Ounces; cut them to pieces, put them into a  
Retort, pour upon them twelve times as much Spirit of  
. ‘ Wine once rectified, and then add one Ounce of pounded

Sal Ammoniac, and three Drams of Salt of Tartar. This  
bring done, immediately lute on a Receiver, and distil  
with a gentie Heat, not exceeding I5o Degrees. By thia  
- means, there will come over into the Receiver' a white  
' ' alcaline, alcoholisated Salt. When this ceases to rise, in-,  
crease your Fire a littie, and the Spirit of Wine will Come  
off, and appear in Very oily Streaks. . Proceed as long aS  
you heve any of these Spirits, and when the Salt begins  
... to he dissolved by the watry Part that ascends last, desist  
from the Operation, and put the Liquor thus prepared into  
a Vessel, which must he stopped Very .close. What re-  
. - mains after the Distillation, throw away.

Take an Ounce more of the same Roots, cut Very small,  
. put them into a Retort, pour upon them, the Liquor  
drawn off hefore, and distil till the Salt, which will come  
' off first, begins to be dissolved. Shake the Salt and Spirit  
till they are .thoroughly mixed together, and stop them  
- in a vessel as close as possible;

REM A R K 8. .

The Alcali of the Tartar, absorbing the Acid of the Sal Am-  
- moniac, feta its pure Alcali free, and so renders it volatile,  
\* which, bring united with the pure distilled Spirits of'Wine,:  
makes with these the Volatile Salt of the preceding Process ;  
and with this again, from the natural Disposition of .the Al-  
- cohol, the Spiritus Rector of the Angelica unites itself,  
which resides in its balsamic oily Parts, and is Very Volatile.  
Hence the Nature of the Alcohol, which equally unites with  
all these Kinds of Spirits, is here determined by the particu-  
lar Spirit of Angelica. In the mean time, the Volatile and  
ς fixed alcaline Salts, and the acid Spirit of the Sea Salt, help  
to open the Body of the Angelica'during the Distillation,  
- and thus dispose it to give out its Oiis and Spirits more sue-  
' cesssully. The Liquor thus produced, on account of its  
- Fragrance, grateful Taste, Penetrability, Mobility, and sa-  
ponaceous, anti-acid, and anti-austere Virtue, furnishes us  
with a Medicine, which, in the Hand of a ikiIful Physician,  
may be used with great Success; for it is of Service in ast  
watry, pituitous, cold, acid, and austere Diseases, in Cases  
where the Bile does not perform its Office, and in almost  
every Disorder, where there is a Languor without any In-  
’ stamrnation and Putrefaction; particularly, when, at the same  
time, an irregular Mobility of the Nerves and Spirits causes  
troublesome hypochondriacal and hysterical Paroxysms; and  
in Flatuses, that arife hence, it proves an excellent Re-  
medy. It is a noble Cardiac, Stomachic, Calesacient, Su-  
dorific, Diuretic, Diaphoretic, Antiparalytic, Antispasmo-  
dic, and Antiepileptic Medicine, where the Disorders are  
owing to the Causes above-mentioned. The Credit of this  
is particularly due to *Basil Falentine,* and *Franceseus Syl-  
vius,* who first introduced this noble kind ‘of Medicine into  
’- Physic. The Followers of *Sylvius,* however,, by an unrea-  
.- sonable Use of it, heve frequentiy brought it into Disgrace  
*... Bocrhaavds Ghymistryi*

The second Species is **the**

: ANGELICA SYLvEsTRIS; Ossie. Binds. 26. Mori Uminsq.  
Parin Theat. 94O. Ger. 846. Emac. qoo; Rail Hist. I. 43.4.  
Synop. 3. 2o8. Mere. Bot. I. ip. Phyt. Brit. 8. Met. Pin;  
8ι *Angelica fylvestris major,* Co B. Pin. I55. Booth. Ind. A.  
.5I. Hist. Oxon. 3. 28o. Rupp. Flor. Jen. 222. *Angelica  
fylvestris mama et vulratior.* I. B. 2. IAA. *Angelica scheliris*

*vulgatior,* Chaly. 400. *Angelica aquatica.* Dill. Cat. Giff«  
I56. *Angelica palustris,* Rivim Irr. Pent. *Imperatoria prar  
tensis major,* Toum. Insta 3I7. Elem. Bot. 2by. WATER-  
ANGELICA.

It delights in watry Places, and Sowers *ittjufy.* The Heth  
is used in Medicine, and is supposed to he endued with the  
same Virtues as the garden Angelica, hut weaker. *Dale.*

' . The third Spectes is-the -

**. HEREA GERARDI,.** Ossie. Ger. 848. Emac. I.OOi. Merc.  
Pot. I. 42. Phyt. Brit. 58. *Mer.* Pin. 6.I. *Podagraria* Ri\*  
Vin. Irr. Pent. Dill. Cot. Giffi 9o. *Podagraria Esuini et  
Lobelii,* Rupp. Flor. Jem 225. *Podagraria vulgaris., Pnthe*Theat. 943. *Angelica Podagraria dicta.* Mor. Umb. 9. An-  
*gelica fyiuejiris minor feu erratica,* C. B. Pin. I 55. Ran Hist.  
I. 435. aynop. 3. 2O8. Boeth. Ind. A. 53. Fourn. Inst.  
3I3. elem. Bot. 262. *Angelica spsuestris repens,.. J,* B. 3.  
145. Chain 400. Hist. Oxon. 3. 281. GOUT-WEED.

This grows principally- in the Hedges of Gardens. It flow-  
ers in *June* and *July:* The Herb and Root are recommended  
sor the Gout. *Dale:*

r The fourth is the

**εἴ ARCHANGE** LIeA, Ossie. J. B. 3. I43. Ran Hist. 2.454"  
Chain 4oo. *Angelica Scandiaca, sieve Archangelica Tabernae-  
tnontant, qua umbella est flava, femine rotundiore.* C. B. Pin.  
I55. Boerh.fnd. A 53. *Archangelica seu Angelica Tabernae-  
inontaatisuc Scandiaca,* Herm. Praelecti *Angelica prima,* Boerh.  
Hist. P. 84. *Imperatoria Archangelica dicta,* Tourn. Inst.;317.  
Elem. Bot. 267. GREAT WILD ANGELICA. ;

It agrees in Virtues with the former. . . ,

ANGELICUS PULVIS, Angelic Powder. Another Name  
**for the MERCUR1U5 VITAE.** *Castellus. See* ***MERCURIUS***VITAE.

ANGELINA ZANONI ACOSTrE. *Castanea Mala-  
barica Angelina dicta Ansyeli,* H. M. *An Angelina Arbor,*C.B.?

Thess a Tree ofVast Bigness, sometimes abovefixteen Foot  
thick, which grows on rocky and sandy Places in the Country  
of *Malabar,* in the *East-Indies,* and bears ripe Fruit in De-  
*cernber,* and continues bearing *for* a whole Century.

" The dry'd Leaves, heated, alleviate the Pain and Stiffness of  
the joints, and discuss art Intumescence of the Testes, occa-  
sioned by a Contusion, or any external Violence; and also an  
Hydrocele, or Pneumatocele. Being reduced to Powder, and  
applied outwardly with white camphorated Ointment, they  
cure Venereal Buboes. ’The same, bruised with the Root ns  
Turmeric, and rubbed every Day on the Part, by their astrin.  
gent Virtue in consolidating the Orifices of the Vessels, abso-  
lutely cure an inveterate Flux of the Haemorrhoids, The un-  
ripe Print, too greedily eaten, excite a Diarrhoea, to which the  
Root and Bark put a Stop with the same Facility. The Gil  
expressed from the Fruit, boiled, taken inwardly, or applied out-  
wardly, excites an Appetite, and helps Digestion. The same  
used with roasted and pounded Garlick, or fried in coagulated  
Milk, and applied to .the Place, is an effectual Anodyne,in the  
Pains of the Haemorrhoids. *Rail Hist. Plant.*

ANGELOCALOS, the true Name of the twenty-fourth  
Antidote of *Myrepsus,* according to his Translator and Com-  
mentator *Fuchsias,* instead of the common Reading, *Alcancali.*This he infers partly from the corrupted Word, and partly from  
*orae Latin* Copies os *Myrepsus,* which read *Aleancalus,* and .in-  
terpret It *boms Nuntius,* a good Messenger, the Very Meaning  
of *Angelocalasi* See **ALCANCALI.**

ANGELUS, a Confection. *Johnson.*

ANGELYN,siye *Aridira,* Pison. MarcgraV. *Arbor mu.,  
cesera Brasiliensis, Fructu Ovi Figura et Magnitude.* Rali  
Hist. Plant. The same as *Andira* hefore. . ,

ANGL Buboes, or Tumors in the Groin. *Fallopius de  
Morb.Gall. '*

ANGIGLOSSI, Stammerers. *Blcmcardo*

ANGINA, from ἄγχω, to strangle, a Qinniny-. . ..

**'OBSERVATION L ‘**

A certain Butcher, about Noon, began to he sensible of a  
Pain about his Larynx and FauceS, which was accompanied with  
fome Difficulty in eating and drinking; towards the evening  
he went to an Apothecary, who gave him a Gargarifin of  
Plantain and Lettice-water, Dinmoron, and Vinegar. After  
he had used this Medicine, he was seiherl with intense Pain,  
and was suddenly cheated in theNight-time; but preserved.his  
Senses to the last.

Upon opening his Body, che Substance or Parenchyma of  
his Lungs was sound converted into Pus ; and in one os his  
Sides there was also an Abscess filled with Pus, He had never  
been troubled with a Cough before, nor had a Spirting os Blood  
preceded his deplorable Fate; on the contrary, he had all along  
appeared to he bless'd with a sound and robust Body, and was  
so sar from being meagre, that he was sat. *Dodorucus, Cap.*18. *Observat. -*

OBSERVATION **IL ' "**

One *Abraham Parrow,* a Soldier in the *French Service,* and  
a Man os fifty Years of Age, in order to prevent the Conse-  
quences os an *Enter atele,* submitted to Castration, which Ope-  
ration was successfully performed in the Beginning Of *September  
thII.* Three Weeks after, when every thing seem'd to he in  
a goed way, when the Consolidation of the Wound was judged  
to he just at hand, and the Patient beginning to walk through  
the Town, he was seiz'd at once with a Difficulty Of Deglu-  
tition and of Breathing.. AS he was in imminent Danger, **1**was Called the third Day. All his Tongue, except the veiy  
Tip, was as black aS a Coal He lay with his Breast in an erect  
Posture; .and if any thing was given .him out of a Spoon, in  
brought on a kind of Suffocation ; sor which Reason, notwith-  
standing his great Weakness, he obstinately refused the things  
that were offered him. Tho' the Season was actually cold, he  
would allow nopart ofhis.Body io remain covered with Cloaths,  
except his Feet. *I* forthwith ordered a Clergyman to he called,.  
sor the Take of his spiritual Interest. I perceived all the Sym-  
ptoms of an Angina, tho’ nothing appeared either internally,'  
or externally, except the. Blackness os his Tongue; Hence *I.*pronounced, that there was an internal Gangrene, the Result  
and Offspring, aS it were, of the Inflammation which I fu-’  
spected to he in the Lungs. There is a remarkable Consent he-  
tween the Testes and the Breast, to which Circumstance *Hip-  
pocrates [Lib.* 6. *Epidem.}* advises the Physician to give due At-  
tention. The miserable patient died about an Hour and an  
half aster my Departure. . . . u

The Wound, made in this Patient’S Right Groin, being  
carefully inspected, the Operation, which was .performed by **a**-young Man of the Name of *Colet,* had all the Appearances of  
its having been done by the Hand of an Artist ; for no Mark»  
of an Inflammation appeared. He proceeded from helow up-  
wards in bin Operation. The interior Part cd-his Neck was lon--  
gitndinally dissected, where **the** *Artena Trachea* was found **free**fromevery kind of Phlegmon, asw ere likewise theadjacent Muf-  
cles. The Gland called *Thymus* was swelled, stuffed with black  
Blood, and pressed upon the *Trachea.* The Thorax being  
compressed, there bused a Sanies from an incision that was  
made in it; and when it was .quite laid open, we discovered  
most evident Marks of an uncommon Inflammation in **the**Langs; for -they were distended with a Very black Blond, livid,  
bespangled with a Vast Number of black Spots, and the other  
evident Signs of a Gangrene, especially towards **the** Back.  
Hence it appears, that the Difficulty, of Deglutition and Re-  
spiration, aS also the Loss of Speech, (for the Patient Could only  
pronounce the Letters A and O) are to he ascribed, as well **as**to the Compression ofthe *Trachea* by that tumid Gland, and to  
its heing drawn downwards by the Weight of the Matter col-  
Iected in the Lungs; but we had not an .Opportunity of disco-  
vering the latent Abscess from which the Sanies came, because  
he was buried sooner than we Could have wished. His Liver,  
which was ill coloured, .and Very tumid, discovered itself thro?  
his Diaphragm, which it herd forced upwards. I heard he had  
**a** Very voracious Stomach, *Boneti Sepulch. -*

**OBSERyATIoN III.** I

In the Year ϊύιδ. there appeared in our own Country,  
**an** extraordinary and uncommon Distemper, which proved  
mortal to many People, and especially Children,thy extinguish-  
Ing or flopping their Breath. This was called by the *Greeds  
esyXlen AptpeAnlumi,* by others *The Suffocating Disorder of the  
Fauces,* or *The pestilential Carbuncle*; by most ’tis called *Passio  
Angi nose,* the *Syriac* Ulcer by *Aretaus,* or *The pestilential  
Tonsillae* by *Artius.* But many things plainly point out to us,  
that the Disorder has its Seat in some Part higher than the Tim-  
fillae, which Part is the Brain; and this Conjecture os mine  
is savoured by the Dissection of many who have died of that  
Distemper, in whose Heads .Grumes of Blond have been sound  
diffused for a goed way under the largest Sinuses of the Dura  
Mater {*Severinus de Abscessibus, Tract, ult.j. We heve* like-  
wife found the Nerves passing through the Foramen Occipitis,  
to the Muscles of the Neck, Larynx, Os Hyoides, and Fauces,  
very much injured in thin Distemper *[Thom. Bartholinus, Com...  
ment. in dictum affectum, Exerrti.* I .J. .See AedYPTIA UIe  
CERA.

OBSERVATION **IV.**

**. A** Man, **who** seemed to have been suffocated by an AI^ja,  
had nothing preternatural in his Larynx; hut his Liver itself  
**was purified to fitch a** Degree, that it might have been mould-  
ered away like a Piece of Earth. The Reason was, the Ahun-  
dance os Exhalations and Ichor, which flow'd from char Putre-  
section, being diffused thro' the Membranes of the Larynx, sh  
contracted it, that he died in the Space of thirty Hours, **-tho\***there was as yet no Streightness in his Fauces; hut it must  
he owned, that this Effect was principally owing to **the exces-**sive Load of putrid Matter contained in his Liver.

This seems to he confirm'd by a Disease incident to Horses,  
which we call the *Vives,* and which generally seizes them onon  
their drinking. Water when they are over-heated by violent

Exercises; sot when they are allowed to do so, the Glands of  
their Necks swell, and they generally die within two Days ;  
and, according to the Observation of *Glessen,* their Livers  
are sound entirely dissolved into a putrified Matter. *Bmeti  
Sepulchretum Anatomicum.*

**' DIAGNOSTICS** *and* **PROGNOSTICS.**

That Disease which the *Latins* all *Angina,* is by the *Greeks*distinguished into several Species, each of which has its respe-  
ctive Name. Sometimes neither any Redness nor Swelling  
appear, bur the Body is parch'd, the Patient breathes with Dif-  
ficulty, and a general Imbecillity seizes him. This Species is  
called συνάζχη- Sometimes the Tongue and Fauces swell, and  
become red, the Voice is intercepted, the Eyes are turned up,  
the Face grows pale, and the Patient is affected with Hiccups.  
This Species they call the συνάζχη. Both these Species of the  
Distemper have these Symptoms in common, that the Patient  
can neither eat nor drink, and has his Respiration interrupted.  
The Disease is still milder, where there is only a Swelling and  
Redness, without any of the other Symptoms, and this *Sper*ties is called*es^stauvdsyyt. Celsius, Lib. An Cap. An  
- : A Qpinsey* is a very acute Disease, as it is an impediment to  
Respiration. Of this there are two Species ; one is an Inflam-  
ma tiomof the Organs *of* Respiration ; the Couse of the other  
resides in the Breath,. which is respir'd.

. The Organs winch are the Sear of the first Species, are, the  
Tonsils, the Epiglottis, the Fauces, the Uvula, and the supe-  
rior Extremity of the Aspera Arteria ; and if the InfiammatiorT  
fpreads much, the Tongue and Inside of the Cheeks are also  
affected ; insomuch that the Tongue is so inlarged, aS to hang  
out beyond the Teeth, sorwant of Room in the Mouth. This  
is called Cynanche, κυνάγκη, cither because Dogs are much  
subject to . these Disorders, or hecause these Animals, even in  
Health, have a Habit of putting out their Tongues.

- In rhe other Species, the Organs above-mention'd collapse,  
and are each more extenuated than in a natural State ; and an  
**excessive** Strangulation attends it, insomuch that **the** Patient  
seems to perceive a; hidden Inflammation in the Breast. *Are-  
tegus, asigrl* όξέων παθῶν, *Lib. I. Cop. y.*

*: The Author proceeds to prove, that the Cause of this second Spe-  
cies resides in the Air respired; but as in this he is evidently  
Wrong, I stall omit taking more Notice of it.*

.. In that Species of Qttinsey call'd *Cynanche,* the Patients la-  
hour, under an Inflammation of the Tonsils, Fauces, and of  
the whole Mouth ; the Tongue hangs out beyond -the Teeth  
and Lips ; a large Quantity of Saliva is discharged; and a Vis-  
cid cold Phlegm flows from the Parts affected ; the Face is  
**red.** and fwell'd; the Eyes are prominent, staring, and inflam’d;  
what is drank returns by the Nostriis, the Passage into the  
Stomach heing obstructed-; the Pain is excessive, but, in some  
measure, less perceiv'd on account of the Violent Strangulation;  
**there is** a Sensation of Heat in the Thorax, and about **the**Heart ; a perpetual Define of fresh Ain attends, tho' but little  
**can he** inspir'd, till at last the Passage thereof into the Thorax  
being entirely obstructed, the Patient is suffocated. In some  
**the** Disorder is readily remov'd to the Lungs, and Death **is the**Consequence of such a Tranflation : The Fever is flow, gentie,  
(μολακοι) and not easily relieved.

' If the Distemper Verges towards a happy Conclusion, Abs-  
cesses are form'd here and there, either externally shout the  
Ears, or internally in the Tonsiis; and if these suppurate slowly,  
and without acute Pain, the Patient may recover ; however,  
not without much Trouble and Danger; Bur if a larger Tu-  
mor inclines to suppurate, the Patient is suddenly strangled,  
just upon the Elevation of the Abscess into a Point. Tins is  
the Form of a Cynanche.

In a *Synanche,* the Parts ahove-mention’d collapse, and ap-  
pear extenuated and pale; the Eyes are hollow, and sunk ; the  
Pharynx (φάρυγξ, he means the Parts shout the Fauces) and  
Uvula are drawn backward: the Tonsiis retire; the Speech is  
lost, in this the Strangulation is much greater than in **the**. other, because the Seat of the Disease is in the Thorax, where  
the Origin of Respiration resides. These Cases are Very acute,  
and prove fatal the Very Day that they seize, sometimes even  
hefore a Physician Can he called ; or, if he is called, he can  
seldom he os any Service, the Patient expiring before his Art  
**can** have any good Effect.

When the Disease takes a Turn fur the better, all the Parts  
inflame, and the Inflammation is elevated into a Tumor exteo\*  
nally. A large Tumor, or Erysipelas, appearing on the Breast,  
**are** good Signs. Hence a skilful Physician will inVite the Dis-  
order outwards, by Cupping-glasses upon the Thorax, or by  
Sinapisms apply'd to the Breast, or about theJaws; will endea-  
vour to draw the offending Matter outward, and thus make it  
perspire thro' the PoreS. It sometimes, however, happens,  
that the Disease is by these means, for a short Time, deed-  
sited upon the external Parts ; but soon after retiring, imme-  
diately suffocates the Patient.

- The Causes of this Distemper are various; aS Cold **fre-**quently ; Heat not so often ; Wounds ; the Bones of Fish

stinking in the Tonsiis; drinking cold Water ; Intemperance  
in Drinking or Eating; besides the ill Qualities of the Air re-  
shin'd. *Aretaus, rid offoepe xahar, Dip.* I. *Cap. y..*

To this Doctrine of a Qpinsey, I shall add that of Crpelsus  
*Aurelianus,* who informs us, that this Distemper is called *Ly-  
cane he,* as well aS *Cynanche,* because the Patient, under this Dis- '  
order, exerts a Voice like a *Dog,* or *JPoffe* But it must he  
remark'd, that, *is Aretaus* distinguishes betwixt a *Cynanche,*and a *Synanche, Caelius Aurelianus* comprehends both Sorts  
under *Synanches '*

It is the distinguishing Character of these two Authors, that  
their Descriptions of Distempers are extremely picturesque, and  
in this they excel all other Authors. For this Reason, *I* have  
given both, as they may illustrate and confirm each other.

One Species os Synanche is attended with no manifest Tu-  
mor ; in another it is Visible and manifest ; one affects the In-  
side, another the Outside of the Mouth ; another both the in-  
ternal and external Parts on the Right or Left, or on both  
Sides; some, as for Instance, *Valens* the Physician, in his third  
Book of Cures, have given Names to each particular Distine  
ctiotu That Species, indeed, which is without manifest Tu-  
mor, they have left without a Name; but that which comesi \*  
attended with a Visible Tumor, is it affect both the interior ..  
Sides of the Fauces, they call a *Cynanche*; for it causes a DissiY  
culty of Respiration, and a Prominence of the Eyes, and a  
Faltering of the Tongue ; as it often happens to greedy Dogs,  
who, stimulated by a Sense of Hunger, fall fearless on a Piece os  
Meat, which, thro' their Haste, sticks in their Tbroat, and  
they can. neither swallow nor bring it up again. If the Distem-  
per only lies in one Side, they call it a *Para cynanche.* If the  
external Parts on both Sides he affected with a Tumour, it has  
the Appellation of *Hyanche,* [from ἐν, a Swine, and άγχω, to  
strangle] because the Necks of Swine are Very subject to these  
Inflations, which the *Greeks* call *Hyai* [υαι]. If the Tumor  
affects both the internal and external Parts on he th Sides, it in -  
properly called, aS they tell us, a *Synanche.* If it he only on  
one Side, a *Parafynanche.* To give Names to their specific  
Differences, is not material. .

The antecedent Causes of this Disease are some of them  
occult, .others evident, and common to other Disorders, but  
especially strained and laborious Vomiting, more particularly  
aster corrupted Food. Ebriety also, and drinking of Snowr  
water, and Vehement Exclamation, kept up to the same Height  
and Tone of Voice, which the *Greeks* call *Monotoswn,* may he  
reckon'd among the Causes of this Disorder. It is produced also  
by a Catarrh, by acrimonious Foed, eaten contrary to Custom,  
by Medicines of a hot and fiery Quality, taken inwardly, by a  
purging Dose of Hellebore, and in some Women by a Retene  
tion of the Menses. Men are more subject to it than Women ,  
and young Men, and those of a middle Age, than Boys *Cssi*old Mem

*Asclepiades,* in the second Book of his Commentaries on *Hip-  
pocrates’s* Aphorisms, defines a Synanche to he a Flux of Hu-  
mour, or Humectation of the Fauces, or their upper Part, use\*  
ally derived from the Heath Bur this is an imperfect Defini-  
tion ; for, every Flux of Humour, which they call a Rheue  
matism, is the Falling down or Discharge of a copious Liquor. ”  
But in Persons afflicted with a Synanche, there appears, indeed,  
a Tumor, but no great Discharge of a Humour is perceiv’d,  
unless it may sometimes happen from a Pressare.

We, according to the Sentiment of *Soranus,* define a Sy-  
nanche to he a Difficulty of Deglutition, and an acute Strangu-  
lation, proceeding from a Vehement Tumor of the Fauces, or  
the Parts by which Deglutition is performed.

in our Definition, we join an acute or Vens quick Strangu-  
lation with a Difficulty of Deglutition, to distinguish this Dis-  
order from a Tumour of the Tonsiis, or Uvula. For where  
there is a Synanche, there must of Necessity he a Tumor of  
the before-mentioned Parts;4 but it does not follow, that  
whenever this Tumor happens, there must presently he what  
we call a Synanche : For those who are molested with a Diffi-  
culty of Deglutition in a medcrate Degree, do not seem arrived  
to the Pitch of a *Synanche,* fince the Essence of this Affection  
is understood to consist in the Greatness of the Tumor, which  
also distinguishes the Strangulation, occasioned by this Disorder,  
from what is caused by the Constriction of a Cord ; for, in  
the latter Case, there is also a Very acute and sodden Strangu-  
lation, but not owing to a Tumor. *Caelius Aurelianus, Acui.  
Morb. Lib.* 3. *Cap.* I»

The Symptoms which afflict the Patient under a Synanche,  
are, at first. Pains without evident Cause, a Difficulty of  
moving the Neck and Throat, a considerable Discharge of  
Saliva, without any Visible Tumor, with a dull Pain, and  
sensible Asperity of the Fauces ; a Difficulty of swallowing the  
usual Fluid which gathers in the Mouth like Spittle ; after  
these, an Impediment of Respiration, as if clogged with some  
gross Humour. Ψ\*.. ' .

AS the Disease increases, rhe Part grows red, with a Inani\* 7.  
fest Tumor ; and, at last, the Fauces, Uvula, the Parts  
above the Tongue, and the superior Part of the Tbroat, are

-elevated by the Tumor to a remarkable Degree, which is at-  
tended with a Difficulty of swallowing- whatever is received at  
the Mouth ; besides a Strangulation in Proportion to the Tu.  
Inor, a Difficulty of Respiration, And a Nausea. If the Mouth  
os the Patient he open'd, a dry Tension of the Tongue, when  
compressed with the Finger, is perceived.

- When the Distemper is increased to a Vehement Degree, **the**Tumor spreads over the Neck and Face, the Mouth flows  
with Spittle, and a Viscid Humour; the eyes are prominent,  
bloodshot, and the Veins appear distended. .

Is the Patient still grows worse, the Tongue fells without **the**Teeth, there is a Dryness of the Fauces, - a cold Numbness of  
the Joints, a swift and frequent Pulse, a Difficulty of lying,  
especially on the Back or Side, with a frequent Desire to sit,  
and an inarticulate confused Speech, not without Pain.

\* If the Disease tends to the Destruction of the Patient, as he  
grows worse, he becomes livid in the Face, and speechless;  
there is a Stertor in the Throat and Breast ; whatever Liquid  
he takes, recurs; and. there is a Failure in the Pulse, which the  
*Greeks* call ἀσφυγμία. ... Some , utter a Voice like a- Dog,  
others froth at the Mouth. Upon these .Symptoms Death ne-.  
oeflnrily ensues. : . ; . ’ d

If the Disorder he without a manifest Tumor, there is a  
Slenderness of-the Neck, with an inflexible Erection and **ex-**tension of the fame ; the Face and Eyes are hollow, the Fore-  
head is distended, the Colour like Lead, Respiration is extremely  
difficult, but with.no manifest Tumor, as I said before, or  
Inflammations either in the internal or external Parts.. The  
Patient labours under an extreme Weakness and Duiness, and  
dies tinder a Very quick and acute Suffocation.

" Γ If'an Erysipelas breaks out about the Neck or Breast, and  
continues, it is Very often a good Prognostic ; for it seems to  
signify a-Tranflation of the Humour from the inner Parts to  
the Superficies. But if, in spite of all the Assistance of Medi-  
cines, the Erysipelas on a sudden disappears, it is a fatal Sign ;  
for it shews a Translation of the Humour from the Superficies  
inwards. - If an Erysipelas appears not while the Distemper is  
in its State, nor, proceeding from the inner Parts, -shews itself  
outwardly, but-is either antecedent to the Disorder, or conco-  
initant with it, it is, on all Accounts, a bad Prognostic. Plenty  
**os** Humour, or viscid Saliva, is bad, in the State os the Dis-  
ease, but good and salutary, in the Decline ; for, in the first  
Case, it signifies a Very great Strangulation, but in the latter, **a**Relaxation. Sometimes this Disorder increases to such a Height,  
aS to cause a Stricture in the Fauces, Throat, and Chin. Now  
a Stricture is an acute, quick, and Violent Distemper, and Very  
often, continual, but .sometimes intermittent. *Callus Aurss.  
-Acnt. Morb. Lib.* 3/ *Cap. 2.* **See STRICTURA. -**

i -A Quinsey. without any evident. Tumor in the Neck or  
Fauces, (φάρυγίι).but. attended .with Violent Strangulation,  
and difficult Respiration, is fatal either the first Day, or **the**third. : *Hippoc. Coac.. Prance. .. .. .*

- - Quinseys. equally troublesome with the former, as to- Stran-  
gulation, and difficult Respiration, but attended with a Tumor  
-and" Redness of the Fauces, are . extremely dangerous; but,  
however, do not threaten so immediate Destruction, if the Red-  
nessjo considerable.. *Hippoc. Pradict. . .*

.-Is a considerable Redness appears at the same time in the  
'Fauces,', (φάρυγξ) upon the Neck and Breast, the Case is less  
acute ; most, .who are thus affected, recover, unless the Red-  
ness suddenly disappears.' *Id. Coac. Praenot. : .* ι

. But'if the Tumor and Redness disappear, without any exter-.  
nal. Abscess, or gentie and unpainful expectoration of Pus ; or  
ifthis does not happen upon criticaIDays, the Disorder is satal.  
Perhaps also the Lings suppurate. It is therefore much the  
.safest, when the Redness and Apostemation Verge towards the  
external Paris. *Id. ibid. ..... .. .*

When the Erysipelas tends from the internal to the exter-  
nal Parts, it is a good Symptom ; on. the contrary, when it  
tends from the external Parts inwards, it is fatal. It Verges in-  
ward, .when the Redness disappearing, the Breast is oppress'd,  
and the Difficulty of Respiration increased. *Id. ibid.*

When a Quinsey removes to the Lungs, the Patient" **gene-**.rally perishes within seven Days ; but if he escapes, a Suppu-  
.ration of the Lings ensires, unless a large Quantity of Phlegm  
Is expectorated.*.. Hi ihiA* 3 . ..

- When, by reason os the violent Suffocation,, the Foeces are  
suddenly discharged, the Caso is desperate. *Id. ibid. ,*

In Quinseys, if the Spin in dryish, (ὑπερίξηρα,.thickand vis-  
cid} without any Tumor of -the Fauces, it is of bad Presage.  
*'Ll. ibid.* - .Ἀ i . .

. In Qttinfeys, if the Tumor of the Tongue subsides without  
sufficient Reason, it is a satal Symptom. The Pain also vanish-  
ting suddenly, and without any manifest Cause, portends Death.

l The Doctrine of the latter Part of this *Prognostic* cannot  
he too often inculcated, because it is alfo applicable to all inter--  
-nal Inflammations whatever. The fudderI Disappearance of  
Pain, without sufficient Cause, is a Sign, that **a** Mortification  
is begun. - ἐν. . .. . .... .

In Quinseys,'is a well-concocted Saliva .is not .soon dis-  
charged, the Case is desperate. *Hippoc. Coac. Pranot. '...*

In a Quinsey; Pains in the Head with a *sever,* without any  
Alleviation of the Symptoms of the Quinsey, portend ill.  
*Id. ibid: . .*

In a Quinsey, Pains in the Legs, attended, with a Fever,  
whilst the particular Symptoms of the Quinsey remain, with-  
out Alleviation, portend ilk. *id. ibid.: . / ’*

- Pains in the Hypochondria, subsequent roth etuinsey, termi-  
nated without a regular Crisis, together with great. Imbecillity,  
and a Torpor, prove satal unexpectedly, tho’ the Patient, in  
Appearance, .is upon the Recovery. *Id. ibid.*

InQuinseys, if the tumesy^d Parts subside, without salutary  
Signs, and the Pain removes to the Breast and Belly, with Tension  
of the Part where it fixes, a purulent Diarrhoea ensues, otherwise  
there will be no Solution os the Disease. *Ide ibidi*. In Quinseys, all Pains have a fatal Tendency,, which doinot  
manifest themselVes externally. .. Sometimes Pains are translated  
to the Legs, winch prove Very chronical, .and do not cause a  
Suppuration, without great Difficulty. *Id: ibid.*

In a Quinsey, the Spit, which is Viscid, thick, whitish, and  
which is brought up with Difficulty, is bad ; aS are all inch im-  
perfect Concoctions. In such Cases, a great Number os Stools  
reduces the Patient to a Paraplegia, and Death ensues. *Id. ib.*

If the Spit, which happens from a Quinsey, is dryish, (ὑπεροξηρα,  
thick and Viscid) and is frequently discharged with a Cough,  
and Pain of the Side, it is a satal Symptom. If the Patient  
cannot drink without Difficulty, and if whet he drinks is driven  
back with a Cough, the Case is dangerous. *Id. tbid.*

A Quinsey is an Inflammation of the Fauces, attended with  
an ardent Pain, Tumor, Redness, a Difficulty of Respiration  
and Deglutition, and a Fever. It arises from a Stagnation of  
Blood, or of an acrimonious and Viscid Serum in the sanguineous  
or lymphatic Tubes, .and is not.Void of Danger.

In order to form a Judgment of this Distemper, **we** are fust  
find principally to consider the Parts where it is seated, which  
are the Fauces, and especially the Pharynx and Larynx, with  
**the** adjacent Parts... In this are included many Parts, which .  
are of Very great Use, and of quick Sensation; such are, **the**Root of the Tongue, with the Os Hyoides, the Holes of **the**Nostrils, which open into the Mouth, **the** Beginning of **the**Oesophagus, the Muscles of the Pharynx, with the internal-  
and external Muscles os the Larynx, in Number thirteen, he-  
sides the greater and lester Glandules, the Tonsiis, the Muscles  
that move the Jaws, the smaller sanguineous and lymphatic  
Vessels, with the tender Branches of the Nerves. ed

The Quinsey is esteemed more or less dangerous, according  
to the Parts affected by the Inflammation,.and goes under dis-  
ferent Names on the same Account. There in a Very old. Di- ‘  
stinction os a Quinsey in general, into an inward and outward  
.Quinsey: The first is seated in the inner nervous arid muscular  
Membranes of the Fauces, and does not discover itself by any  
outward Tumor or Inflammation, either in the Neck or Face,  
but there is an inward burning Heat, with an acute Fever, -  
and if the Case he worse than ordinary, not only a Difficulty  
of Respiration, but of Deglutition, and the Patient is in. great  
Danger. - . . . ἐν . -si

The external Quinsey is more conspicuous to Sight, and prin-  
cipally affects the external Muscules, and glandulouS Parts,, **the**Tonsiis, .with the Root of the Tongue, and .the Uvula ; it is -  
also more easily cured.

If we consider this Disease, more particularly with respect  
to the Part affected, the most terrible and dangerous Quinsey  
is usually that which is seated in the internal Muscles of. the .  
Larynx, and does not discover, itself outwardly by any Redness, -  
or other Symptoms about the Neck or. Throat; but the. Pa-  
tient is afflicted with a Vehement internal Heat and Pain, and  
by reason of the Contraction os the Orifice of the Aspera Ar- \*  
.teria, not only the Voice is suppressed, , bur Respiration is-per-  
formed with Difficulty, and' sometimes .wholly stopped, often  
in so : short a Time, if we believe Observation, as to kill the  
Patient within the Space of four-and-twenty Hours, or. on **the -**third Day. : This the *Greeks* call *Cynanche.*

What they call *Synanche,* affects the internal. Muscles .of **the**Pharynx, and is, dike the other,. without any conspicuous ex.,  
sternal TumoTor Redness, but attended with a greater Diffi-  
culty of Deglutition than Respiration ; sor whet the Patient  
: endeavours to fwallow, as Violentiy discharged by-the Nostriis.  
-But . when the Tumor and Redness render themselVes. sensible  
to the Sight and Touch, .the Inflammation, which has its Seat  
in the external Muscles of the Pharynx, is, thy the Antients,  
called *Parafynanche,* as the other, which , seizes .those of the  
**Isarynx, is named** *Paracynanche. . ..*

. Again, a Quinsey is distinguished, by . practical Physicians,  
into the true or perfect Quinsey, and the ipuriout one.. ...  
- The true Quinsey arises from, a Stagnation of the Blood, but  
-the spurious one is rather owing, to an inflammatory Collection  
of Serum, than of Blood, in the interior Parts os the Fauces and  
-Neele The true Quinsey is an acute Disease, and never with-  
out Shiverings and a .Fever ; the spurious Quinsey is attended

rather with a lvmphatical and catarthous, than an acute Fever.  
In the periect Quinsey there is not only a burning and pungent  
Pain about the inward Parts of the Fauces, but the Tongue  
also is turgid with Blood, and of a dark red Colour ; there is  
also a Redness of the Face, and a great Pulfe of the temporal  
Arteries, which are attended sometimes with a Pain in the-  
Head, and a Drowsiness and Numbness of the Senses, and  
sometimes Faintings. Is the Disease he Violent, there is a Dif-  
ficulty of Respiration, with great Anxiety, Restlessness, and  
Coldness of the extreme Parts. This is a Very dangerous- Case,  
and requires immediate Relief. But in the spurious Quinsey,-  
these Symptoms are forne of them wholly absent, others less  
Violent, and there is less to he feared under a right Manage-  
ment. Moreover, a Quinsey may be divided into a Very hot  
and.dry, and into a moist, or Very mucous one. The .former  
takes itSRise from the Blood, and is eccompany'd with a Very  
acute Fever, aS was find os the true Quinsey. The other if  
inore 'chronical, and comes attended with a catarthous Fever,'  
is sarniliar to cachectical and scorbutic Persons, and covers the:  
Tongue and Fauces with a thick flimy Mucus, which causes a  
foetid Breath. ’ - ' -..

\* All these Species of Quinsey deserve to he distinguished from  
dther Affections of-the Fauces. The true and dry Quinsey  
must not be mistaken for that mucous Inflammation of the  
Mouth and Oesophagus, commonly called *Prunella Alba.* For  
in'the latter, the whole Region of the Fauces, and the Tongue,  
are cover'd with a white Mucus, the Tongue contracts painful  
Fissures, and there is a burning Heat, which reaches even to  
the Diaphragm. This frequentiy happens in malignant Fevers,  
and is for the most Part a bad Symptom, because it indicates an  
Inflammation of the Stomach and Oesophagus. Nor is every  
Inflammation of the Fauces a Quinsey, but that only winch is  
attended with a Difficulty of Respiration and Deglutition.  
Wherefore there is a wide Difference betwixt a Quinsey, and'  
**a** flight Inflammation of the Neck, and the internal Parts of  
the Fauces, with a Tumor and Pain of the Glandules, which’  
frequentiy happens Io scorbutical Persons, and those affected  
with the-Venereal Disease, if it proves obstinate, and is accom-  
panied with Erosions ’ The true and internal Quinsey must  
also he distinguished from those Spasms which are usually inci-  
dent to hysterical and hypochondriacal Patients, which con-  
tract the Face, and cause a Difficulty of Respiration, aS well  
as Deglutition.' 'These Symptoms happen without a Fever,  
land soon remit, and leave the Patient, and easily give way to  
Medicines. lastly,'The Quinsey differs from those het and  
painful Pustules on the Tongue, which they call *Aphtha'.* For  
thofe affect only certain Parts, and are accompany'd with a  
Pain and Rednessj nor are’they so constantiy attended with a  
Fever, as the Qttinsey. "s . ’; : ' ' '

The immediate Couse, then, os a Quinsey is a Stagnation of  
the Blood, or sometimes an inflammatory Collection of Serum  
in the internal Parts of the Fauces; to produce which, many  
things may concur. For 'tis evident, from Observation, that  
it is frequentiy consequent upon the Suppression of a spontane-  
ous Evacuation, as of Blood, either by the Nostrils, Uterus,  
’ Haernorrhoidal Veins, or of the Lochia, or upon the Omission  
**os an** habitual artificial Evacuation, by Scarification or Phlebo-  
tomy. In Bedies thus predisposed, the Disease is foon form’d,  
after a inore than ordinary Commotion of the Blood, drinking  
freely of Spirituous Liquors, Violent Exercise, *or* even too high  
straining the Voice, especially in the cold Aur. I have observ'd  
also the Beginning of an Inflammation like that of the Quin-  
fey, after taking a pretty strong Sudorific, follow’d by a too  
sudden Admission of the cool Air; or taking a Draught of cold  
Liquor, after corning out of an over-hot Bath; winch, how-  
ever, by the Help of proper Remedies, both internal and ex-  
ternal, have in a short time heen happily discuss'd. A Quin-  
fey is no less frequentiy generated by oppressing the Fauces with  
acrimonious things, which too much irritate and overstrain **the**Fibres and Vessels. ‘We know by Experience, that a fetal in-  
flammation of the Fauces has Often surprised those who **have**lived and slept in Rooms, which have been newly plaster'd over  
with Lime; and I myself knew several Infants kill'd at once by  
**the** same Means. That the same inflammatory Quality helongs  
**to** Caustics, is agreed by all. Among Cathartics, White Hel-  
lebore, by a kind of specific Property, communicates its In-  
fluence to the Fauces, and causes a Strangulation. Quicksilver,  
and especially ill Preparations of it, are known to incommode  
and inflame the Fauces. The same Effect is observ'd, by Phy-  
sicians, to follow the Use of the *Solanum Furiosum,* and the  
Bite of a mad Dog. The Fumes arising from arsenical and  
mercurial Ores, and the Vapours of mineral Spirits, unwarily  
drawn in with the Breath, have a principal Tendency to pro-  
mote this Disorder; for the very subtie and penetrating pointed  
Particles of all these Substances, deeply infinuating themselves  
into the Muscles which move the Cartilages of the Larynx, by  
there straining the nervous Membranes, and intercepting **the**free Passage os the Bleed through the Vessels, **excite an** inflam-  
Inatory Tumor of this kind, with a Pulsation, **and a** pungent  
Pain, which is often fetal.

The the bare inhesion of sharp and pointed things'in these  
solid Parts, is sufficient to cause this Affection, is evident from -  
the Effects which the small prickly Bones of Fish produce by  
sticking in the Fauces, which are Very often Inflammations of  
this kind. You have a remarkable Observation to this Purpose  
*in Hildanus. Cent.* 3. *Obs.* 42. ’ i

*- By some os* the before.mention’dWays is a Quinsey soon-  
taneoufly excited: Bat it often succeeds some other Disease ass'  
^Symptom; which happens frequently in a Diarrhoea and Dy-  
sentery, especially if the Flux he-unseasonably stopp'd ; of  
which we have a memorable Example in *Hildanus, Cent. p..  
Obs. ley.* The same EVent follows the preposterous repelling  
of an Erysipelas, or the Application of Improper Topics to the  
Gout.’ The Quinsey also frequentiy supervenes upon the Small-  
pox, and malignant and pestilential Fevers. In particular, ana-  
toinico-practical Observations upon the Distemper call'd **the'***Hungarian Fever,* assure ns, that it commonly ended in **a**Inflammation of the Meninges and Fauces, which spread itself  
to the Stomach and Oesophagus, and carried off the Patient:  
But-the Cause of this symptomatical Quinsey might, for **the7**most part, he found to he a too Jong Constipation of the Belly,,  
an imprudent Checking of Perspiration, or a preposterous re-  
pelling of the acrid caustic Matter, upon the inward Parts.  
When the Distemper is epidemical, it must he attributed to  
some Fault in the Air, which usually, on these Occasions, has  
in it some degree of Malignity. It often-happens in the Spring  
or Autumn, after a long rainy and moist Constitution of **the**Air, aS *Hippocrates* of old observed. *Sect.* 3. *Aph.* I6.-20. 22.  
and *Bartholine* confirms by his own experience. *Cent.* I. *Obs.*SI .‘‘This Disorder also usually attacks thofe who breathe an  
Ain impregnated with Effluvia of the Nature of a Very acrid  
subde Sals, communicated to it by a Multitude of Insecti there  
residing, especially at theSetting os the Sun. From thisCause,  
*Hollertus, Prax. Lib.* I. *Cap.* 23. affines, that the Quinsey  
is Very common at *Rome,* and sometimes rages like the Plague.

A Qpinfey is Very dangerous, not only on account of the  
**Fever,** which is often acute, but the Fear of Suffocation. **The**most dangerous is the true, internal, .and hidden Quinsey, as  
**we** said before; and of this Sort must he understood whatLby-  
*pocrates* pronounces, *Preedict. Lib.* 3. *Cap.* 8. " The Qpinfey  
" is a Very terrible Disease, and soon proves fetal, if it shews  
" nothing conspicuous to the Sight, either in the Neck or  
" Fauces T for the same Day, or the second, or the third, or  
" fourth, it strangles the Patient." The greatest Danger of  
Suffocation is, when the Muscle call'd the *Thyroatitenoideus,*whose Office it is to close the Larynx, .is affected. The sym-  
ptomatica! Quinsey is also Very dubious, and full of Hazard; for  
the, Patient, by reason of the Weakness of his Body, already  
exhausted, and the Vinilence of the Matter, seldom gets over  
it. It is a Very had Sign also, when the external Tumor sud-  
denly disappears, the Symptoms not being mitigated, het rather,  
exasperated: For, in such a Case, the morbific Matter passes  
over the other nervous Parts, and directs its Course either to  
the Brain, where it excites a Pbrenfy with Convulsions; or to  
the Lungs, where it causes a Peripnenmony, which, according  
to *Hippocrates, Sect.* j. *Aph.* IO. ends in Death. But when  
**the** suffocating Strangulation remits, and **the** Tumor, Pain,  
and Redness tend principally to the outward Parts, and  
Vanish by degrees, it prognosticates a happy EVent; if **the**Case he otherwise, the Disease terminates in Death, or an Abs-  
cess ; if in an Abscess, and there he an Effusion of Pus into  
the Bronchis and Lungs, according to *Forestus, Lib.* I 5; *Obs.*24. the Event is Very doubtful; is in Death, Frothing at **the**Mouth, a Tongue very much swell'd, and of a purplish black  
Colour, Coldness of the Extremities, an uncommon Anxiety,  
and Compression about the Praecordia, and a hard, convulsive,  
and intermitting Pulse, prognosticate its Approach.

**CURE** *of a QttlsstSET.*

' The Method of Cure recommended by *Hippocrates,* Consists  
in bleeding in both Arms, and opening the veins under the  
Tongue, in LambitiVes capable of induing the Humours, in  
het GargarisinS, and evacuating a Part of the Humours by an  
increased Discharge of Salina, and in shaving the Head. A  
Cerate should also, according to him, he applied to the Head  
and Neck, and over this Wood; and the external Parts must he  
fomented with soft Sponges, wrung out of warm Water. The  
Drink ought to he Water and Hydrornel, but by no means  
cold; or Cremor os Ptisan, when the Danger is judged, from  
the Crisis, to he over. *De Ratione Victus in Acatis.*

in both Spectes of Quinsey, if the Strength of the Patient  
will permit. Blood is to he taken away, even tho' it should not  
abound in him. The next Step is to purge. Cupping Glasses  
must also he applied directly under the Chin, and about the  
Fauces, that the Humours, which cause the Strangulation, may  
he invited outwards. Moist Fomentations also must he made  
use os, for dry ones render Respiration more difficult: There-  
fore Sponges are to he applied, which are frequentiy m he flipp'd  
in warm Oil, rather than in warm Water. Warm Bags of Salt  
**are also** of great Efficacy in these intentions. It is also advise-

aide to gargle the Mouth with a Decoction of Hystbp, or Cat-  
mint, or Thyme, or Wormwood, or even of Bran, or of  
dried Figs, in Hydromel; after these anoint the Palate with  
Bull's Gall, or the Composition which derives its Name from  
Mulberries. Powder'd Pepper may also, with very good Effect,  
.he sprinkled upon it. j .. ..

- If these have but little Effect, the last Remedy is to make  
deep Incisions under the Jaws, above the Neck ; or in the Pa-  
late about, the Uvula ; or to open the Veins under the Tongue,.  
that by these Wounds the Humours, which cause the Distem-.  
per, may be discharged.

If by these means the Patient is not eased, we may know,  
that the Disease will prove fatal: But is he is so far relieved, as  
to he able to eat and drink, the Transition to Health is not dif-  
ficult. in some Cases, Nature will assist, provided the Disease  
removes from a narrower to a wider Part. Therefore, if **a**Tumor or Redness arise about the Praecordia, we may be satis-  
isy'd, that the Fauces are set at Liberty.

.. But-by whatever means Relief is procur'd, the first Aliments  
which are given must be liquid, and in particular Hydromel;  
after these, solid Foods, which are soft, and Rot acrid, till the.  
Fauces recover their usual Habit.

It is commonly reported, that is any one eats a young Swal-  
low, he will he in no Danger os a Qtjinfey *sor* that Year: And  
it is farther affirm'd, that if the same he preserved with Salt,  
and burnt, upon an Attack of this Distemper,- and the Ashes  
are powder'd, and put into Hydromel, which is given to drink,  
it will he of Service. This I thought worthy os inserting, the' I  
have not met with it in Medicinal Writers ; because it is a po-  
pular Remedy in some Reputation, and cannot possibly **have**any ill effect. *Celsos, Lib. An Cop. 4: '*

. For the Cure os a Cynanche, that Species of Quinsey which  
is attended with a Tumor of the Fauces, *Aretaus* advises the  
following Method, which, he says, must he immediately pur-  
sited ;. hecause the Distemper, being extremely acute, soon  
proves fatal.

If the Disorder is caused by.a Debauch, either in eating, **or**in drinking, the intestines must he wash’d not only with one,  
hut with two Clysters.. The first must he of the common Sort,  
being only intended to discharge the Excrement; the second is  
design’d to draw a Part of the Humours from theTonsiis **and**Breast ; therefore let it not he simple, but made of a Decoction  
*of* Centaury, Hyssop, *JPorrmvood, Calamint, and Birth-wort,  
with an Addition of Honey, and a great deal os. Nitre*; for **these**draw away Phlegm. And tho' the Patient has lived temperate-,  
ly, the Vein in the Cubit must he open'd, and with a large.  
Orifice, that the Blood may flow from .it with impetuosity,  
and in a large Quantity; for by these means it will he more  
likely to moderate the Heat, relieve the Strangulation, and mi-  
tigate all the Symptoms. It will not he amiss to let the Patient  
bleed till he is near feinting, but not till he actually saints; for  
some have, upon these Occasions, died in the saluting Fit:  
Mean time. Ligatures must he made above the Ankles and  
Knees, hut particularly upon the Wrist near the Cubit, and  
upon the Cubit near the Humerus. If the Patient can swallow  
easily, give him as much Elaterium as is sufficient to purge him,  
its Hydromel and Whey ; sor, of all Cathartics, Elaterium is,  
in tins Case, the best : Cneoron and Mustard [νάπυτ are also of  
Sendee; sor both these purge the Belly.''

’ Is, , by the Use os these Remedies, the Inflammation is not  
mitigated, bending the Tongue upwards, open the Veins on the  
under Side, and if a large Quantity os Blood is discharged from  
these,, it gives greater Relies than all the rest. Let the inflam’d  
Parts be moisten'd with Reshingents at first, that the lnunda-  
tion os Humours may he somewhat check'd ; for this Purpose  
use Wool, greasy with the natural Sweat, and let it he impreg-  
nated with Wine, and the Oil of unripe Olives. Cataplasms  
also of the same Nature must he applied, as of Dates moisten'd  
and bruis'd with Wine, together with Rose-flowers; and that  
these Cataplasms may heve a proper Consistence, that is, he vis-  
cid and soft, let Meal and Lin-seed, and Honey and Oil, enter  
their Composition.

But if it verges towards Suppuration, make use of warm  
Topics, aS in the other Species of Quinsey: Let therefore the  
Meal he that of Fenugreek; and let the Powder of Frankin-  
cense [μάννα] and Resin he melted ; and let the Tops os Poley-  
mountain he strew'd in : To these add hot Fomentations, by  
means os Sponges, press’d out of a Decoction of Laurel-herries  
and Hyssop. The Dung also os Doves and Dogs are powerful  
Promoters of Suppuration, pass’d tiuo’ a Sieve, and applied to  
the Part. Proper Lotions are prepared of Hydromel, with the  
Decoction os Lentils, or Hystbp, or Roses, or Dates, or of all  
together. . The Mouth must also he anointed as far as the Pha-  
rynx, either with simple Medicines, aS the Juice of Mulberries,  
or of Pomegranates bruised with Water, or a Decoction of  
Dates; or else with Compounds, as those winch take their  
.Names from Mulberries, from Rue, the Juice of Pomegra-  
nates, or from Swallows. But if there are Ulcers in the  
. Mouth, with Eschars, proper Lotions and Gargarisins are pre-  
spar'd of Decoctions of Hyssop in Hydromel, or os sat Figs in

Water, with an Addition of *Amylum,* moisten'd with Hydro-  
mel, or the Juice of *Ptisim,* or of *Tragus.*

But in that Species of Quinsey which is attended with an Ex-  
tenuation of the Parts, and is called *Synanche,* all possible En-  
deavours must be used m invite the Humours, and the Heats  
and the Flesh, outwards, , that all the external Parts may swell:  
Let therefore the Embrocations he hot, and made with Rue and  
Dill, withan Addition os Nitre ; and let the Cataplasms, above  
specify'd, he said on with these. It will also he of Service to  
apply a Corate, with Nitre and Mustard, in order to excite  
Heat; for Heat in **the external** Parts contributes much to **the**Cure of these Disorders, and to the Swelling of the Neck; and  
a Tumor, fifing externally, preserves the Patient from a Peri-,  
pneumony ; but if it retires inward in a Quinsey, it is a **satai**Evil.

Those who, apprehending the Suffocation in a Quinsey,  
make an incssion in the *Asipera Artcria,* in order to render Re-  
spiration easy, do not seem to me to nave confirm'd this Prac-  
tice byexperience; tor the Heat, arising from the Inflammation, \*  
is increased by the Wound, and adds to the Fatigue and DarH  
ger of the Strangulation and Cough : Besides, is the Patients,  
escape this Danger, the Lips of the Wound will not unite,  
hecause, heing cartilaginous, they cannot heal. *Aretaus de  
Curatione Acutorum, Lib.* I. *Cap.* 8.

There is, after this, something omitted in the Copies of *Arar  
taus* now extant; for *Aetius* quotes some things from this Au-  
thor, not to he found here, aS is specified below.

By *Nitre, Aretaus* means *Natron,* a Salt Very different from  
our *Nitre.* See ANATRON.

*Ccelius Aurelianus* has preservedishe Practice of a great many  
of the antient Physicians, which would otherwise have been  
soft to us; and is Very free in. finding Faults, for which he  
sometimes gives but indifferent Reasons, He was of the Me-  
thodic Sect, and as he believed the Causes of Diseases resided in  
’the Solids, and were nothing het too tense or lax a Tone of  
their Fibres, he reduced InostDiseases under two Heads, which’  
were those of *Stricture* and *Solution:* Thus, for instance, a  
Pbrensy was, with him, a Disease of *Stricture*; butaDiar-/  
rhoea, on the contrary, was called a Disease of *Solution.*

The Patient under this Distemper must lie in a lightsome  
Place, moderately spacious, warm, and free from offensive  
Smells. Air, thus qualisy'd, is of a laxative Disposition, and \_  
proper to insinuate into the tumid Parts. The Posture of De-  
cubiture ought to he supine, the Head a little raised, in a firm  
and immoveable Position, or one in which the Patients say  
they find most ease; for all Motion is painful to Persons labour-,  
ing under aTumot. The Neck and Breast are to be cover'd and  
cherish'd with clean, soft, and nndy'd Wool, dipp'd in warm  
sweet Oil, not omitting gentie Frictions of the Joints , for the -  
Relaxation, (consequent on Perspiration thus promoted, is corn.'  
Inunicated to the affected Parts.

Rest and Abstinence are to he injoin'd for the first three  
Days, together with a laxative Gargarism. Fomentations with  
warm sweet Oil are to he used, and Bladders, half-full of **the-**same, are to he applied to the outward Parts. Is the Disease be  
Violent, Phlebotomy is to he administer'd within the three  
Days; for quick and sudden Bleeding is necessary for a most  
speedy Relaxation. Is there be no urgent Necessity, Bleeding,  
may be omitted till the third Day, or, if the Strength continue,'  
till after it, and then used, if any emergent Occasion required,  
it.- "..sc. - ' - . ‘7 *sm.t.* T .ss

The Person to whom Bleeding has been administer'd within  
the three Days, is afterwards to have his Head and Neck son  
mented with hot sweetDil, and have some of the same in-'  
, still'd into his ears; and then to use a Gargarishi His Drink  
must be warm Water, or Mulsum, and inot by Draughts, hut.  
SippingS, lest the tumid Parts should be irritated by a troubles  
some Deglutition and Percussion.

If we bleed the Patient on the third Day, he must after-  
wards have his Body anointed round with sweet Oil warm'd/  
and his Face moderately fomented with warm Water; then,  
we may give him sorbile Food, but Very thin or fluid; or else  
some Bread dipp'd in Mulsum.

Is Deglutition he difficult, fo as to prevent the Sick from  
receiving into his Stomach what is given him for that Purpofe,  
it will he sufficient, for supporting his Strength, to instil Mul-  
sum. Drop by Drop, into the Fauces. We must also con-  
tinue to give him Food every other Day, till the Decline of the  
Distamper.

It will also he convenient, for some Days after Phlebotomy; .  
to make use of Cataplasms, which may he outwardly applied,’  
round about the Neck, but let them he of the mild and simple  
Kind ; such aS het Bread dipp'd in Water and Oil, or carefully  
mollisy'd in Mulsum, or Flour of Wheat, or Barley, or lin-  
seed, or Fenugreek. The fore-mention'd Simples may singly,  
or mix'd together, he taken out of warm Water, Oil, or  
Honey, or a Decoction or infusion os the Root of Matsh-mai-  
lows, and *so* applied. These Cataplasms are frequentiy to he  
chang'd, lest, by long Continuance on the Part, they contract  
**a** Sourness **from the** corrupt Exhalations of **the** Body. They

ire also to he bested, that their Vapour may continue the longer;  
and outward Applications are to he made of Sacks of Bran boil’d  
in Water, or Bladders half full of het Water and Oih The  
Vaporation of Sponges, squeez'd out of warm Water, alone or  
mix'd with Oil, or a Decoction of the mild Laxatives, is good  
in this Cale. Sponges are also to he applied to the Neck and  
Throat, and those Parts which, by them Swelling or Inflam-  
mation, hinder Deglutition, or to the Mouth and Nostrils; the  
Patient also is to he exhorted to fuck in the Vapour with open  
Mouth ; for Vaporations received this way descend deep, and '  
relax the Tumor.

ι Gargarifms are to he used, which have a Congmity with Co-  
taplasrns, such as warm and sweet Oil, or hot Water and Oil;  
also Mulsum, diluted with Water, and boil'd; Milk alone, or  
mix'd with Honey or Water, fo that there he an entire Deter-  
fion of all the curdling Parts; lest, if any should remain; they  
might contract a Sourness from the Heat of the Places;

- We are also to make use of a Decoction of Bran and Liquo-  
rice, or of Lin-feed and Fenugreek, but never boil’d to the  
Thickness of a Cremor ; left by its viscous Tenacity, in Con-  
junction with the Viscidity of the Humours, it should occasion-  
a Difficulty of Respiration. Besides these, the Decoctions of  
Marsh-mallow, Wild-mallow, *Syrian* Sebestens, Club-moss,  
sat Dates, or juicy Figs, are all recommended, as well as **the**Juice of Alics, or Ptisan.

When the Disease begins to decline. *Sybaritic, Critic,* and  
Raisin Wines are proper: But as for\* light Astringents, and  
what they call Inspissants, *[Stymmata]* .1 think them at this  
time inconvenient; for these are Remedies that we use in the  
- Beginning of the Disorder, while the Symptonis are light,-and  
the Patient only complains of a flight Pain in the Fauces and  
Uvula; for *Thessalus* himself orders Posca, when he is call'd m  
attend those who are threaten'd, but not actually sein'd, with a  
Synanche;

in short, we thirst shake nse not only of Posea, but of a  
Decoction of gentie Astringents, such as Roses, *Thebaic* Dates,  
Lentils,’ Myrtle, Lentilk, and Mastich, any one of which may  
he boil'd in Mulfum, or some other of the fore-mention'd  
Juices, whenever we find, that their ashingent Quality requires  
Correction by the Mixture of a laxative Liquor. The Juice of  
Rice also is of Service, and the Medicine call'd *Diacndion* dise  
solved in Mulsum, and oftentimes in Substance, if the Fauces  
are anointed with it. Of the same Virtue are Diamoron, Dia-  
poron; Diamyrrhion, the Troches of Andron; and theSphragis  
of Polyidas, Anthera with Honey, and all Medicines prepared  
of Quinces or Pomgranates, Roses, the Rinds of Pomgranates,  
Galls, the Juice of unripe Grapes, Bok-thorn; and the like. -  
' But when the Disease is form'd, we are to do as hefore ads  
vised; hesides which, if we find the Humours’, which are con-  
densed by the Heat, betome glutinous, and appear outwardly,  
we deterge them with a het Sponge; hut if they lie deep, the  
Dipyrene [an instrument for cleansing the Throat} must be im  
troduced, with its Head wrapp'd in fine soft Wool; for the thick  
and vifcous Humours; if suffer'd to remain; would accelerate  
Suffocation. - If they lie so deed-aS-to he out of Sight, they  
are to he attenuated by taking Mulsum; but hell'd beforehand;  
which makes it of greater Efficacy;-some give Ptisan mix'd  
**with** a littie Salt. - \_ - - -

- All Medicines endued with a sensibly biting Quality are so be  
avoided; for, by irritating the Tumor, , they would incrassate  
**the** Humours floWing to the Part. τ . ;

- If the Belly does -not perform its Office, Clysters are to he  
**ufed** of warm Water and Oil, sometimes with, and sometimes  
without Honey ; for the Vapour which ascends from the Liquor  
relaxes the tumid Parts about the Neck, and an exonerated Bel-  
ly causes a free Respiration, not only under a Synanche, but  
eVen in Health; whereas an undue Retention of the Farces  
burdens Nature, and, by a sort of Compression; is the Cause  
of Very acrimonious Exhalations in the Body, by which Tumors  
are irritated, and the Head sill’d. - ' .. .

After a Clyster,. Copping and Scarifying will he proper in **the**Time of Remission; but if there he a Continuation, and the  
Disease proceeds without remitting, they are best applied, aS  
well as other *district isle* Remedies,' (which take away Stricture)  
**at** the Dawn of Day. Cupping Glasses then are to he applied  
to the Fore-part of the Neck, or to the Throat, which Places

were by the *Greeks* call'd *Anthereona,* also to the hinder Part of  
the Neck, and those large Nerves which they call *Tenontes,* and  
one to each Part under the Pits of the Ears, *[sub Aurium Lacu-  
nisc* in which Places the Position of the Fauces is plainly to he  
observed. -

- But if the Difeafe does not abate, and the Patient is too deli-  
cate for this Method of Cure, and fearful of being touch'd with  
the Point of a Lancet, we are obliged to apply Leeches, which  
the *Greeks* call βδέλλαι, to the Places we have mention'd; and  
if, after they are sailed off, the Evacuation they make is not  
sufficient, we take care to apply Cupping Glasses to the Pun-  
ctures they have indicted, in order to draw off as much aS shall  
he requisite ; besides, we use Fomentations of Oil, with pro-  
per Cataplasms and Vaporations, After these we ply the Pa-

tient with Epithems insisted in hot Oil, and Vaporate with  
Sponges squeez'd out of the same Matter; for we disapprove **the**dry Vaporation by Sacks, aS capable of Condensation. In an  
extraordinary Tumor we scarify also the Tongue, wish the  
Fauces and Palate, by means of a flender and pretty long  
Bleeding-lancet *[Phlebotomus]*; for the tumid Parts are relax'd  
by drawing off Blood from the Places.

Aster Scarification we use mild Gargarisms, and if the Dis.  
ease begins to decline. Unctions of the Fauces, or of the into- .  
rior Parts, as with boil'd Honey, or with a Medicine prepar'd  
of a Decoction of the Wild-mallow, with the Seed os Fenu-  
greet, Lin-seed, Amylum, Honey, and Oil; or with stoned  
Raisins bruised, with Bread ; or a Decoction of linseed ; or  
with Honey, and *Cretic* Raisin-wine, in which have been boil'd -  
the Root of the Wild-mallow; or the Flour of Alina and Lim  
seed. ' ...

If the Distemper continues without Abatement, we use Sca-  
rification a second or a third time, not only of the Throat, or  
Parts adjacent to the Tonsils, which the *Greeks* call *Anlsccreon,*and the great Nerves of the Neck call’d *Tencutes,* but to the  
hinder Part of the Head, the Scapula, and Interscapula, which  
the *Greeks* call *Metaphrenon,* and to the Breast: For tho’ the  
Parts administering to Deglutition he most eminently affected,  
other Plants of the Body fuffer by Consent. . ..

Many there are, who, not understanding the Method of suhe  
doing the Disease, but only labouring to divert the peccant Mat-  
ter, and placing the Causes in the Fluids,’ advise above all  
things to apply Cupping Glasses to the Groin, then to the Re-  
gion of the Diaphragm, then upon the Breasts, with Scarifica-  
tion ; after this they apply the same to the Throat, the Neck,  
and the Parts thereto helonging.

If the Disease be evidently on the Decline, we should, diet  
the Patient upon Pulse [a Sort os Panada] and poach'd eggs, or  
Hog'S Brain, utterly rejecting all acrimonious, high-season'd,  
heating. Vinous, rough or dry Food, or whatever may irritate  
the Parts appropriated to Deglutition ; sor the Disorder easily  
returns on a Very flight Occasioni We should also apply Cere-  
cloths, prepar'd with sweet Oil, or *Oleum Cyprinum,* or Gleu-  
cinum, or Irinuin, or Malabathrinurn, *si\_s.ee the Composition of  
these Oils under their proper Adjectives ^* with the Root of  
Marsh-mallow. Then let the Patient bathe, and afterwards  
drink Wine. *Caelius, AcuL Morb. Lib.* 3. *Cap.* 3.

Among the Antients, *Hippocrates,* in his Treatise upon the  
*Cntdian Sentences* (on Regimen in acute Diseases) telis us, that  
Patients tinder a Synanche are to he blooded in both Arms ; but  
this mustthe avoided , for a coacervated Effusion of Blood may  
Cause a Fainting, for which Reason we are restrain'd from  
taking'away so much aS would he sufficient for relaxing **the**Stricture. --- . ς ;

He also’ directs the Opening os the sublingual Veins, which  
is not only useless, but hurtful; for the Matter, flowing in great  
Abundance to the Passage, is there stopp'd for want of sufficient  
Vent, and fills the Parts; which by this means are rather loaded  
by the Accession, than relieved by the Recess os Matter.

Again, a Fillet is to he bound about the Neck, in order to  
raise the Veins, and especially when the Synanche is without  
any manifest Tumor. Now. a Fillet, aS every body knows,:  
must increase the Difficulty os Breathing: Besides,’ 'tis very  
certain, that the Flux os Blood from the foremention'd Veins  
is difficult to he stopp'd; for we can apply no Restringent to  
the Place without Danger, and 'tis impossible to tie the Veins.  
Tis also natural for Turners, after opening, to incline to art  
Haemorrhage. . . - \* - j.

- The Author afore-mention'd uses warm Gargarisins and Va-  
porations, but with what ingredients, he does not tell ns. He  
then orders the Head to he shaved, and to he inceflantiy vapo-  
rated with Sponges, and then cover'd with a Cere-cloth and  
Wool He allows his Patients, for Drink, warm Water and-  
. Mulfum; and, in the Decline os the Distemper, feeds them  
with Cremor, *of* whet Kind, he does not specify; bring igno-  
rant also, that this Decline generally, happens not till after **five-**or six Days, and Abstinence from Feed during that Time would  
he unreasonable. , Vaporation ought indeed to he used, but not  
to the Head more than to the Neck, and the Beginning of **the**Tbroat, which the *Greeks* call *Anthereon.* After Vaporation,:  
the Part must he kept warm ; and in the Decline of the Disease  
a Cere-cloth is to be applied.

Moreover, as to Drink, he does not tell us in what Quan-  
tity, nor after whet Manner, nor at what Times he allows it..  
Again, in his second Book *of Diseases,* he says, they ought th  
he relieved with Clysters, and purging Medicines, which **the***Greeks* call *Cathartics,* by whose Acrimony the tumid Parts are  
the more exasperated. .

As to bleeding in the Parts situated under the Breast, we  
judge it hurtful and needless; hurtful, because many Bodies  
must he divided, for 'tis not easy to come to the Sight of **the**Vein ; and needless, because Blood may, with Ease, he taken  
from the Arm to Very good Purpose; besides, the continued and  
joint Detractinn of Matter.by Clysters, Purgatives, and Phle-  
botomy, is plainly intolerable.

Again, if there he great Danger of Suffocation, says he,  
**the** Auliscus, which we may Call the Pipe of a Clyster, must he  
intruded into the Fauces, and the Patient must receive thy this  
the Fumes of burnt Hyflop, Sulphur, and Bitumen. Here is  
certainly a Mistake; for he tries to thrusta Pipe Into theFauces,  
when, through the Violence of the Disease, they can't admit  
the thinnest Air; and he thinks the Patients ought so he fill'd  
with an austere Smoke, by which sound Persons are often ase  
sected with a Suffocation.

In the last Place, he approves of Phlebotomy in hath Anns,  
and in the sublingual Veins, which we have condemn'd, and  
proved to he os no Service; for it cannot he done without great  
Molestation to the Body.:

*Dioclet,* in the Book which he wrote upon Diseases, their  
Caufes, and Cures, says. That sanguine Persons should he  
blooded in both Arms; but those who do not abound with  
Blond should only be scarified. Then he would have the Pa-  
tients continually anointed with Bull's Gall, mixed with Herba  
Pedicularis, which they call *Stavesucre,* and Nitre, *RndCnidian*Grains, and have the same used for Gargarisins. He also pre-  
scribes Pepper to be held under the Tongue, the Neck to he  
Vaporated with Sponges, and covered with Core-cloths, order-  
Ing the Sick to be extenuated heyond all Reason.

AS for our Part, we approve os Phlebotomy, not only for the  
Sanguine, but for all Persons affected with this Distemper, if  
their Strength permit, tho’ not in both Arms, aS we said he-,  
fore ; nor are we sor those extremely acrimonious Ointments  
and Gargarisms, nor do we use any such Inunctions in Tu-  
mors os the Eyes. For Stavesacre will bring a Synanche upon  
a sound Person, by causing a sudden Inflammation of the Fauces.  
Nor is it agreeable with Medicine to reduce the Body, or its  
Habit, by Extenuation, but to relax the tumid Parts by proper  
Reinissives.

*Praxagoras,* in his fourth Book of Cutes, treats his Patients  
under a Synanche, with Clysters, and extenuates them by  
Sweating; sometimes he uses Phlebotomy, and administers a'  
Vomiting Medicine, which they call an *Emetic.* Then he cuts  
off the Uvula, or sometimes scarifies it, and heals up the.  
Wounds with Tar. We are Content, that others should  
give their Opinion of this Method; for excessive Vomit-  
ing, by Distention and Suffocation, has often been mortal,  
and a tumisy'd Uvula wants Relaxation, not Amputation, aS  
well aS other Parts of the Body, which must, of NecessityS he  
relaxed by soft and gentie Means.

*; Erasistratus,* in lus second Book of Anatomies, in which he  
treats of Diseases in particular, prescribes, in some Cases of a  
Synanche, Vaporation with Sponges, Cataplasms, and a Me-  
dicine, winch he called a *Catapotium,* [Pill] prepared *of -Castor,  
to* he taken in Wine. But he did wrong in every Particular ὁ  
for Wine is an Astringent, and every one knows, that Castor is  
of a Very acrimonious Nature, and consequentiy both contrary;  
te a Tumor. *Herophilus* has said nothing of a Synanche .

*Asclepiades,* in his second Book of swift, or acute. Diseases,  
fays. That Persons under a Synanche are to he treated with  
Bleeding, Purging, Cataplasms, Collusions of the Mouth, Garga-  
risins, with attenuating and opening inunctions, such as those  
prepared of Hyssop, Origanum, Thyme, Melilot, Worm-  
wood, Decoction os Figs, Nitre, Stavesacre, Centaury, Ela-  
terium. Bull's Gall, Resin *os* Cedar; to which he adds, **the**. Use of Cupping and Scarification. He denies that Blood can  
he drawn by Cupping, either, says he, hecause this Disease is  
attended with a Fever, or else, by the Prevalency of the effi-  
**cient** Cause of **the** Tuinor, **the** Heat of **the** Cupping-glass is  
over-powered, and diverted the contrary way, so aS to he inca-  
pacitated for Detraction. Phlebotomy he advises to he exercised  
in the Forehead, in the Corners of the Eyes, in the sublingual  
Veins, or in the Arm. If the Disease he Violent, the Fauces  
are to he scarify’d, that is, the Tonsils, and the Parts above  
**-the** Uvula; for the principal Relies may he expected from an  
equal and eVen Incision in those Parts, which he called .flo-  
*snoiotomy.* Besides, he approves the Opening of the Aspera  
Arteria, agreeing with the Antients, who Call itLaryngotomy.

In this Method of his, the Mistakes are many and Various ;  
for whatever is of an acrimonious Nature, is an Incentive to  
the Humours; Phlebotomy also is hurtful to the affected Parts,  
as we shew'd hefore. Besides, he is guilty of an Absurdity, in  
directing the Ufe os Clysters, in order to divert and derive **the**Matter from the suffering Parts, because it is contrary, to **the**Evacuation of those Parts, by cutting their Veins, to which he  
gives his Approbation. He was wrong injudging, that Scarifi-  
cation was to he used first, and then the Veins to he cut; for  
**we** are utterly against these local ways of draining the Part,  
while the Disease is in its confirm'd State. Besides, it argues  
**a** Physician of little Experience, to imagine that the peccant  
Matter cannot he drawn out by the Attraction of a Cupping-  
glass, because a Fever hinders; since we commonly see those  
Glasses produce their effects without Impediment in Fevers,  
and to extract Matter; for Flesh, Blood and Spirit, are at-  
Ethol, and drawn together by their Force, st is to he consi-:

dered also; that we do not use Cupping-glafles whilst the Fit  
is increasing, when the Matter is retired into the interior.  
Parts.

Again, Scarification of the tumid Parts is very troublesome,  
and also dangerous; for it causes vehement Haemorrhages, and.  
such as cannot he stopped- For if we endeavour to restrain  
them, speedy Suffocation will he the Consequence; and is we  
let them alone, a more speedy Death appears to he the Effect  
of this Effusion os Bleed; or If the Patient escapes an Haemor-  
ihage, he will not avoid a Cancer, or a Gangrene, from the  
Increase of the Tumor: For fince we Very osten observe, that  
those Parts, which are -perfectly sound, and in their natural  
State, do yet rise into a Tumor, when scarified, the''treated,  
with Astringents; we may Very well expect, that Parts already  
swelled, if they should he scarified, and. have not the Assistance  
of Astringents, should swell to a more Vehement Degree. Cor-  
tainly, in so considerable a Tumor, and so exasperated aS no t  
to hear the Touch os a Finger, and where the Patient can with  
much Difficulty suffer the Use of CatapinsmS and Gargarisms,-  
a deep Incision, or scarifying of the interior Parts, must ne-  
cessarily he hurtful and dangerous.

AS to opening the Aspera Arteris, which they call *Laryngo-  
tomy,* sor the sake os Respiration, it is a mere Fable, and has  
no Authority os Antiquity, but is a rash and unreasonable In-  
Vention of *Asckpiades.* But m spend no more Time in con-  
fnting this Author, nor use too few Words in shewing our’  
Abhorrence of so desperate an Operation, we shall answer him  
more at large, in a Treatise we design th write on auxiliary.  
Remedies *[Adjutoria]. Themison,* who approves os *Asclepiades?*Method of curing acute Diseases, winch are pot attended with  
**a** Fever, incurs the same Censure, with him.

*Scrapion,* in his first Book of Cures, for a Synanche, pre-  
scribes Evacuation by Clysters, and Phlebotomy, and recom-  
**mends the** Use of acrimonious, irritating, and aperitive Catlon  
plasms and Ointments, which they call *Anastomotici.* He is  
also Very rigorous in injoining Abstinence. . .

This Physician also lies Very open to Censure; for every body  
knows, that Tumors are irritated by acrimonious and attenu-  
ating things; and Phlebotomy, in Conjunction with Clysters,  
is acknowledged to be very troublesome and embarafling.  
Again, in enumerating the Names os the Materia Medies,  
he omits those which enter the Composition of Auxiliary Re-  
medies, tho' Meat and Drink are of no less Importance than  
any other Auxiliary Remedy whatsoever, when under adue.  
Regimen. . . ..... - : Ἀ: .sc

*JicraclidesT.arentinus,* in his third Bood of Cures writing ofIn-.  
ternais, telis us, that " To those who labour under a Redtutn  
" dancy of Blood, we first prescrihe Evacuation by Clysters,  
" and.then use Phlebotomy, sometimes in the Arm, sometimes.  
" in the Sublingual Veins. We also make use of Vaporations  
" to the Neck and Throat, with Sponges dipp'd in warm-  
" Water, which has had Rue and Penyroyal boiled in it." Then  
**he** gives his Approbation of a Cataplasm, which we call  
ώμὴ λύσις, prepared os Mulsum, mixed with Ground-pine,.  
*Illyrian* Orris, or Figs. At Night, he says, we must apply **a:**Cere-cloth prepared of Oleum Irinum, with Rozin and Wax,  
of each an equal Weight.:

In Cases where he suspects a Thickness os the Juices, he  
orders the Fauces to he anointed with Honey and Omphacinm,  
and prescribes sor a Gargarism, Mulsum, in winch have been  
helled Figs, or Origanum, and Pepper mixed with it. He also  
uses Elaterium to the Weight of seven Drams, (an immoderate  
Pose) and gives to many five Grains, in Hydromel or Mulsum.  
After these he administers a Remedy, winch he calls an *Emeticv.*thatjo, of a Vomiting Quality j and is thus prepared ; so .so.

Take, says he, of Origanum and *Hcrculessis* Alheal, each **a:**Handful/and put them in a copper Vessel; then take of  
**what we** call *Red Sumach* [Rhus rubrum] two Pounds,,  
and twenty *German* Onions *[Cepulae Germana,* perhaps  
Squilis] the outer Rind peeled off; and shaking them tor.\*  
gether, put them into the Vessel. Pour upon them **two**Pints os *Chian, Rhodian,* or *Cnidian* Wine, and set them.  
**to** stand **in the** Sun twenty Days before **the** Rising of **the**Dog-star, and twenty Days after. When the Liquor is  
consumed, put in another two Pints, and leave it to stand  
In the Sun; at last, put the Whale into a Mortar, and  
make it into Troches, the largest of a Dram and half,  
. others *of* a Dram, and the least os half a Dram, to he  
given one at a time, with respect to the Strength of **the**Patient, in Mulsum, or like an Electuary in Honey; /or  
in promotes Evacuation of the Viscous Humour by Vomit-,  
ing, and loosens the Belly. Some, he says, add Melon-  
teris, and half a Dram of **the** Juice of Thepsia. If **the**Patient he difficult to vomit, a Feather dipp'd in old Oil,  
and Intruded into the Fauces, will promote it. Sometimes  
he makes use of a Medicine prepared of Omphacium, Fin-  
terinm, and Diagrydium, with black Hellebore and Sale,

if the Patients are difficult to vomit; Or he .uses Elaterinm  
with Vinegar and Rue, Or Elaterinm with Mustard and  
Sain. ' ' '

As for those who fall into a Synanche, from taking Cold, he  
fays, we forbid them Bleeding and Clysters, but in all other  
Cases we use them: He also orders his Patients to he supported  
or dieted with nothing but Water, or Mulsiim.

But all these Experiments, or Essays, seem to he nothing  
but ready Expedients to anfwer some dubious Conjectures. For  
an Emprrin, who has nothing in View but *Oisenacion,* which  
they call τηρησις, thinks Phlebotomy proper only for the San-  
guine, nor considering, that all Synanchical Patients, .if Strength  
will permit, ought to he blooded, on account of theVehe-  
rnence of the Stnctisre. In short, when he forbids Bleeding  
’under 2. Synanche, occasioned by Cold, he deserves to he  
laughed at, for overlooking the present Case, and inquiring  
into the Causes.

The Cataplasms, which he advises, are also hurtful, and so  
is his Vaporatlon, On account of the Acrimony of the Ingre-  
dients, which are of a fiery Nature. Also his vomiting Medi-  
tines, which he calls *Emettcs,* causi\* Swellings where none were  
hefore. For the ferulaceous Plant, which they call *Thopfsa,*is sufficient to bum the Parts to which it is applied, and to in-  
game thefe which are found and in their natural State. The  
same Judgment is to he form’d of thofe which ate composed of  
Onion, Omphaciurn, and Red Sumach, and such-like; old  
Oil also has an acrimonious Quality. What he calls *Ccr.  
thartics,* which we *name Purgatives,* to he administered Clyster-  
wise, cause a great Disturbance in all Humours, and Molesta-  
tion io the Stomach, and other nervous Parts. It allo argues  
Negligence to prescribe no Time when the Patient should take  
hisiced. - ’ - -- ---i;

There are some Physicians also of out Own Soft *(the Methodic)*who, being still addifled to the Errors of the Antients, **have**given their Approbation to unufual and violent Remedies; some-  
times advising human Urine or Ordure, with Honey, Myrrh,  
and Rue; sometimes Centaury, Wormwood, Southernwood,  
Thyme, Birthwort, Tymbra, which we call *Satureia,* [Savory]  
and Mustard j sometimes one shall prescnhe the *Pythagoria* and  
*' Ispperian* Troche, so called from their Inventor, another advises  
whet they call the *Sphragis of Polyidas,* and Consttictives, with  
Unctions, and Cerates of the Ointments of Sampsuchus and  
Rofemary ., all which Medicines, through their excessive Heat,  
with their drying and drawing Qualities, are provocative of a  
Tumor; whereas the Disease is vehement and precipitate Of  
itself, and Ought .to he treated with gentle and simple Medi-  
.nines. *Callus Aurelian. Lib.* j. *Cap. 4.*

**For the Quinsey,**

Take Of Laser Of *Cyrene,* if it cab he procured, if not; take  
*. the Syrian* Laser, and diluting it with Water, anoint the

FauceS therewith by means of a Feather, laying it On  
pretty thick; Or use Euphorbium diluted in the same  
jnanaer» . *. A\* . \* ' \**

Take of Ox-gall, Salt, Vinegar, Honey, old Oil, equal'  
Quantities; mix them well together, and therewith anoint  
the Fauces for a good while together, using a Feather for  
thatPurpofe: Or,

6 Take Tennel-flower fry'd, two Drams five Grains, Pelli,  
tory of *Spain,* one Dram two Grains and an half ; Saga-  
penum, thirry-one Grains ; powder them together, and  
make them into a Mass with Honey.

A very goed Medicine is compofed of

Ox-gall, two Drams five Grains; Elatetium, one Dram  
two Grains and an half; the Seed of Rosemary, one  
Dram two Grains and an half; powder them, and make  
them up with Honey. Anoint the Fauces with this di-  
luted in warm Water, and compel the Patient to swallow  
as much of it as possible ; for it loosens the Belly, and in  
i. , so doing gives great Relief. *Scribamus Lizrgus, Capi* I 6.

Of human Dung I have the following Experiment:

A certain Person was frequently afflicted with Phlegmons  
.about his Throat, in Inch a deplorable manner, thet he was in  
Danger of Suffocation, and tojrrevent it was obliged to blced.  
" He happened to meet with **a** Person, who promised him a Re-  
medy, and desir’d, thet whenever a Phlegmon arose again in  
4ony Part of bis Throat, he migsit he sent *fur* before Bleeding.  
Being called, he anointed the Part with his Medicine, and cured  
- the Man immediately. He find the same Success upon others,  
who laboured under the same Disorder, till, at length, thcGen-  
.tinman, who was in continual Danger of being suffocated, **and**was besides rich, and of a liheralDisposition, desired to pur-  
;chase the Receipt. When they bad agreed on the Price, the  
Seller says to the other, " This Medlothe has its Virtue from

" Antipathy, which Antipathy consists in that the Person **who**" is cured, should he ignorant of its Composition.” Hetbere-  
fore prevailed with him to substitute another in his stead, on  
whose Fidelity he could depend, and to whom the Secret might  
he communicated, upon his taking anOath to discover it to **no**Person while the Anther lived. After the Author’s Death, the  
Perfonentrusted cured not only the Purchaser, but others, with  
this Remedy, and freely and heartily offered to cominunicato  
' the same to me, tho’ I never asked him. It was the Dung of  
a Boy, mixed with *Attic* Honey, dry’d and pulverized. This  
Boy, according so the Authors Prescription, lived on Lupines,  
such *as we* usually eat with Bread thet is well baked, and sea-  
soned with a moderate Quantity of Salt and Leaven. **dine**Boy’s Drink was old Wine; but both that and the Lupines  
were in moderate Proportions, that he might he able to make  
a perfecti Concoction." When -the Boy had been thin dieted  
for oneDays he did not take his Dung the next Day, but still  
fed him in the same manner, and the third Day he saved his  
Dung. He preferred Lupines, avoiding ocher Fond because of .  
the Stench, but he who told me, said, that he had often, for  
. Experiment sake, given the Flesh of Fowls and Partridges well  
boiled, and servedin Water, or small Broth, and that the Me-  
dicine. operated .never-,the worse. *Galen, de Simpl. Madia.  
Facul. Lib. so. '.*

A Stoppage from a Quinsey is tohe looked upon as a-danger-  
ous Case, and so hiuch the more if the Inflammation he feared  
inwardly, so as that no outward Sign appears, and especially if  
’both the Tonsils and the Uvula are inflamed. In this Cimrun-  
Eance, immediate Recourse is to he had to Phlebotomy, but if  
the Patient he unfit for it, he is to be scarify’d upon the Shin-  
bones, and suffered to blced plentifully, acrimohious. Clysters  
**are to** be ofed. Abstinence is tohe inloined, and drawing **Me-**dicines are to he applied to the Neck ; for if the Matter iodged  
jin these Parts can be attracts! outwardly, fo as that a Tumor  
' arises, there is goed Hope of saving the Patient. The Cremor  
*of Ptisan,* mixed with thin Honey, is tohe used for a Gargle,-  
Ora Decoction of dry’d Figs, or of Hyssop, Origanum, and  
Horehound, by which means the gross and glutinous Humours,  
fixed in thefe Parts, are digested. *Oiibasc de Tec. Asset ct. curat.*

*‘ Lib. asc Cap.'ll. ' \_ ' ...*

*Archigenes* says, thet the Caufe of a secret or inward Quinsey,  
'in some, is to be ascribed to the Nerves which serve the" Sto-  
mach : These heing disordered, occasion an Inflammation in  
the subjacent Parts, which arc the Heart and Lungs, rde-Prin-  
ciples of Respiration, from whence it is communicated to the  
‘ Arteries called *Cantides,* and the Parts adjacent. The Reason  
why the Patients in this Case are nos apoplefiic, is, that the  
Cause of this Diseofein only an intemperies, without a Com-  
preshon of she Parts. Medicines of an emetic Quality, fays  
the fany Physician, are proper in this Quinsey, such as Elate-  
num, and Squama AEris with Boney; anointed upon the Part.  
" I relieve many, says he, under art inward Qubifey, with a  
" Gargle of Mustard-seed, and soon after carry them -to the  
"\* Bath; by which means I have saved many, and restored them  
" to Health by a Distribution [of the Matter] over the whole  
" Body. ” *Aretaus* edyises [This *is not found in the Works of*Areneus, *which are extant] to* apply a Cupping-glass first helow  
the Navel, and foon after to the Sides, Back, and Scapuhe,  
still removing it from place to place, and ferting it on in such a  
.manner as to draw from the upper Parts downwards. If the  
Patient be much oppressed, bruise Mustard-feed in Water, and,  
spreading is upon an old Rag, apply it to **the** Breast. Let **a**Linctiisalfo he prepared of Mustard-seed, Nitre, Hyssop, roasted  
Squills, Sulphur Vivum, of each an equal Quantity; to he  
well mixed -with a small Spoonful of Honey, and S0 given. So  
far *Aretaus.* In Phlebotomy, the Orifice Of the Vein must not  
he made so narrow, thet the Blond heing in a manner strained,  
the thicker Parr of it, which is the Cause of the Affection,  
might be left hehincT. If any thing forbids opening of a Vein,  
Clysters are to he given of the Decoction of Centaury, Worine  
wood, Calamint, and Birthwort, mixed with Honey, and **a**good deal of Nitre. The Patient is also to he purged with  
Phlegniagogues, Of which Elaterinm seems most proper some-  
times in a Quinsey; but it ought never to he taken but in  
Whey, with Carduus Benedictus boiled in it. Pilis of Aloes  
and Coloquintida are also good, if the Patient can swallow  
them. It would he proper also to infuse three Drams of Hiera  
Archigenis, in one of the .hefore-mentionedDedoctions, for **A**Clyster, when the Belly has been already cleansed sty in prepa-  
.ratory Clyster before. After ^general Evacuations, Cuppthe-  
glasses ate to he applied; and It there he any Tumor about **the**Jaws, .or under the Chin, they are to he affixed oft the same,  
and the Place is to he scarify in, a good deal Of Blood ortractid,  
andthe Incisions sprinkled and rubbed with Salt: ’ItnoTumor  
appear outwardly,’ as in the occult Quinsey, the Cuppin g-glafs  
is to he apply hi under the Tendon of the Neck, near the first  
Vertebra, and- often removed, with A constaur Attraction; by  
which means the Distocation and Luxation of the Vertebra: are

. well prevented. After some Rest, from the Remedies amove-,  
mentioned. Carapis tins ate to he riled **hoed** on the same and

the next Day. Put our principal Dependence for the'sollow-  
ing Days is, on Lituses and Gargles; therefore if the Distem-  
per at first he Very inflammatory, we begin with mild Astrin-  
gents, such as a Decoction of RofeS, Lentils, and Dates, an  
Infusion of Rose-leaves in Hydromel, a Decoction of Sumach  
in Hydromel, or a Decoction *of* Sebestens. If there happen  
an Excoriation of the Parts, the Cremor of Bread is tohe given  
warm, or the Mouth is to he washed with a Decoctinn of Bran,  
or Milk alone. " l, says *'Archigenes,* am always provided  
" with a dry Medicine, which consists of eight Drams of com-  
" mon Sumach, four Drams of Rose-leaves, and two Drams  
" each of CostuS and Sassion; these I put in Hydromel, and  
" use as a Gargle, with which I have Very easily cured Inflam-  
" mations and Ulcerations of the Tonsils, which threatened  
" Very bad Consequences.\*' The milder Lituses are Very agree-  
able to the inflamed Parts, such as the Cremor of common  
Sumach, boiled in Hydromel to a solid Consistence; but :the  
Sumach is first to be macerated, till the Hydromel he deeply  
coloured, and taste strongly of the same. The Juice of a  
whole Pomgranate, Rind and all, bruised, and mixed with a  
third of its Quantity in Honey, and the affected Parts anointed  
with it, is a good Medicine.

If the Disease yields tn none of these Remedies,'hat the  
Conflux of Humours increases, the Veins under the Tongue,  
orthose in the Forehead, or about the great Canthi, [inner  
Comers of the eye] are to he cut, the Neck is to be wrapp’d

\_ in Cloths moistened with warm Oil, which must be often re-  
newed ; or apply a Cerate, prepared with Oleum Cyprinum,  
or Oleum Gleucinum, or Musteum [Oil of Cyperus, and Oil:prepared os Must, that is. Wine unsermented: See the Pre-  
paration of these Oils under the Words CYPRINUM and GL Eh-  
CINUM]. Is the Disease continue long, you must expect an  
Abscess, in which Cose it will be Very convenient to wash the  
Mouth with a Decoction of FigS, which will he rendered much

. more effectual by an Addition of Hyssop. For Ulcerations,.  
Saffron in Hydromel, and a Decoction of Liquorice, are pro.  
per Medicines. In the State of the Disease, there jo nothing  
better than to wash the Mouth with the Juice os Ptisan or  
Alics, which frees the Patient from many InconVenienciedjind  
prevents an Abscess. -

A Fomentation for the Quinsey, to he recaiyed at the Mouth,  
Idas.follows: *A;-.-*

\_ Take Origanum, Hyssop, Savory, imdFeutiel-seed, with a  
good .Quantity of Vinegar and Nitre; heat them in a Pot,  
that is carefully stopped, with only a Hole in the Middle  
of the Cover, to which, and the Patient's Mouth, must  
he fitted a hollow Cane, through which the Vapour may  
he transmitted. If the Cane .grow ‘ too het for the  
Lips, let the Patient hold in his Mouth an empty

- Fggs perforated at both Extremities, for the Cane to pass  
into. The Fomentation will he the milder, if instead, of  
Vinegar you put Posca, or Water. Sometimes sharper and  
inore severe Remedies are required to make the Flesh rise,  
and to remove the‘ inward and deeply-seated .Streightness  
and Compression, “under which the Patient labours; for

' the Disease often grows so desperate, that it has been  
thought necessary to use things odious and abominable,  
such as human Dung, which, it is certain, has heen pre-  
scribed for a Litns, with the desired Success; some use  
it fresh, others dry'd and powder'd, mixing it with Nard or

‘' Myrrh, to take off the Stench. so . -

From acrimonious and lacerating Medicines, we are to pass  
to those of a milder Nature, such aS *Andr oofs* Troches, and  
the like. Emetics are beneficial, especially to those who have  
a Sense of Weight about the Belly. *Archigene sts* Remedy,  
’ which I use for an inward Quinsey, -and is admirable also in an

Asthma, consists of 1

Four or five Grains os Elaterium, twenty-seven Grains of  
Spuma Nitri, and a Dram of Mustard-seed ; bruise them,  
and make them rip in Water.

Elaterium bruised with Oil or Honey, and rubbed upon the  
Parts.aS deep as it will go, excites Vomiting, and much more

' effectually, if it he mixed with Spuma Nitri. The same Effect  
’. has burnt Copper, bruised with Oil *oiCyperus,* anointed upon the

Parts. Ox-gall, so used, is very good for the same Purpose, and  
\* so is Nitre drank in Oxymel, the Juice os Centaury with Ho-  
ney, and Millipedes made into a Linctus with Honey. Some  
have given a Spoonful of the bruised Seed of Nasturtium in  
Hydromel, and soon after the Patients have vomited up a thick  
and mnacious sort of Phlegm, by which they have been greatly  
relieved.

Take a good Quantity of the Dung of a Cock, that is of  
the. Colour of Ceruss, dry it, and keep it, and when a  
Case requires, give a Spoonful of it diluted in Water or

\* Hydromel It cures those who are given over *y* but if the

Patient cannot drink it, the Parts are to he nibbed with  
It aS deep as you can make it go‘: Or,

Take Centaury, Nitre, common Sals, of each eight Drams ;  
bruise them, and lay them aside dry; when Occasioncalis,  
mix them with Honey, and lay it on with a Feather, or  
-aS you think fit: Yon may confide inthe Use of it; for  
it is an approved Medicine: Or, bruise Wormwood, and,  
straining the Juice, add to it some bruised Nitre, and  
make it into a Litns with Honey\*. Or, make a Lints  
of elaterium. Ox-gall, and Honey, πὸ ' ' . '

The *Diabes.as.a,* in the Beginning os the Distemper, is to he  
taken in a moderately astringent Decoction, such aS these we  
have prescribed : When the Disease is arrived near its Height,  
give it in Juice os Ptisan; in its Remission orDecline, it mutt he  
taken in Honey, Hydromel, or Mulsum; and for an inveterate,  
and in .a manner hardened Inflammation, it is given in Oxy-  
mek ' . ‘

*PhilagriusaMises* us aster the aforesaid Evacuations os the  
whole Body, Cupping, and opening the Veins under theTongue,  
to mix other things with the Diahesasa, partly fuch as will re-  
strain the Influx os the Matter, and partly such as will discuss  
what is settled in the Parts: For example;

Take os Diahesasa, Galls, called *Omphatitides,* White Dog'S-  
ἐν ’ edung, human. Dung dry’d, each eight Drams; but the

Dogs .must he fed with nothing but Bones, for two Days  
before? .~ '

*Martian's* Emetic for inward and outward Quinseys.. " De-  
" Inand your Reward, says he, before you give it " [in- Con-  
fidence of a Cure]. . - \*

f Take burnt Copper, Vitriol, each twelve Drams; Myrrh,  
Elaterium, Spuma Nitri, each one Dram ; ..Ox-gail, four  
Drams. - Make them up with Honey, and with a Feather  
anoint the Parts affected as far aS you can reach

*Archigenes* advises to takoheman Dung, qualisy'd aS before,  
and dry it, then bum it in an old Rag, and afterwards give  
it to he drank in Hydromel.; it cures those that are at the Point  
of Suffocation. - ..c..: .. *gul.t*

*Antonius Musia* prescribes dry'd Dog'S-dang, such aS aforesaid,  
bruised and sifted, to be mixed with Honey, and anointed on  
the Parts so deeply, as that it may he swallowed : " For, says

*Galen, Ϊ* know no hetter Remedy for the Quinsey, or great  
" Inflammations of the TonsdS, Or dangerous Suffocations from  
" the Glandules and Tubercles of the Throat. " The same is  
very effectual, when mixed with Oxymel and Tar, and the Parts.  
anointed therewith. t ... . s. -

An excellent Remedy for the Quinsey is prepared of burnt  
Swallows, in manner following: - —' - - —

Take ofburntSwallows, eight Drams ; Saffron, two Drams;

. Spikenard, a Dram ; make them up with Noney, and use  
it while the Distemper is strong upon the Patient. The -  
Swallows are thus burnt: Take the yonng Swallows after  
 they are feathered,-and put them alive into an earthen

Pot with a convenient Quantity of Salt; and, stopping the  
Pot close, heap burning Coals upon it, till its Contents  
are reduced to Powder and Ashes, which levigate, and so  
use it.- - . - -

Another Preparation of Swallows for the Quinsey :

Take young Swallows burnt, in Number eleven; juice of  
.. green Myrtle, a Pint.and an half; Myrtle, twenty-seven

Grains; Honey, a quarter of a Pint. : Bum the young  
Swallows, and pulverize - them; and then mix the other  
Ingredients. -

A Medicine, whose Efficacy is proved by Experience,-

Take of Malabathrum, CostuS, Cloves, Pepper, - each an  
Ounce; Sandarach, four Ounces; mix them with clari-  
fied Honey for a Litus: Or,

Take Snails which have no Shells, such as are sound in Gar-  
dens, and bum them in a Pot to Ashes, which mix with  
Honey, and so use them ; it gives present Relief.

In like manner the Ashes of burnt Crabs are to he used with-  
Honey, and the Decoction os Crabs is good towash the Mouth.  
I use to bruise a CIab in balsa Pint of Water, and, straining off  
the Liquor, give it warm for a Gargle: It draws off abundance  
of gross Humours, by which the Patient finds immediate Re-  
lief. .

Dry the Lefler Centaury, then burn it, and, wish the Ashes  
-mixed with Honey, make a LituS: Or .......

**- Take**

Take Of the burnt Jaw-bone of a young Hog, an Ounce;  
os Album Graecum, sour Drams ; Rind os Porngranates,  
Galis, - each an Ounce; Castus, sour Drams; Pepper

- roasted; six Scruples: Min them with Honey.

’. -By way os Caution, we ought to he very solicitous and  
careful, when- the Disease seems to remit, that the Matter,  
which was attracted from the innermost Parts os the Body to the  
Faeces, does not, by an unexpected Metastasis, fall down upon  
-the Lungs, and suddenly carry off the Patient. *Aetius, Tetrab.*.2. *Serm. An Cap.* 47. r

*. From* **TRALLIAN.**

\* The most antient Physicians usually called every Kind of In-  
dlammation about the Throat, whether inward or outward, a  
*-Synanche* ; but their Successors have distinguish'd this Inflam-  
-mafion into sour Kinds: Thus an internal inflammation of the  
Muscles of the upper Part they named *Cynanche,* an external one  
*Paracynanche*; in like manner they called an internal Inflam-  
rmation of the Pharynx, or Fauces, a *Synanche ,* and an exter-  
nal Inflammation of the same Sort *Parafynanche.* [To these  
-Species *P. Egineta* adds a fifth, which, tho' rarely, affects  
-Children, and is owing to a Luxation of the Vertebrae os the  
Neck-; this, he says, is incurable. *Lib.* 3. *Cap.* 27.]  
a. This Distinction heing thus established, we are next to direct  
Io a proper Cure for each of thefe Kinds. In general then we  
ought to know, that neither repellent nor discutient Remedies  
are-to be used alone, but in Conjunction; and, that with regard  
to Time, sometimes Repellents, at other times Discutients, are  
-to he prescribed. In the Beginning of the Disorder, and while  
the Matter seems to he in a Flux, Repellents are to he chosen;  
in the State of the Disease, Discutients are generally proper;  
and in its Decline, stronger DiscussiVes. They who use only a  
relaxing Method, either inwardly or outwardly, do a great deal  
Of Mischief, by inducing a Very acute Suffocation, or increasing  
.the-Inflammation, to the utmost Danger of the Patient. And ‘  
we are not only to-consider the-Times, hut the Nature of the  
Remedies. For tender and delicate Constitutions, such aS Eu-  
nuchs. Boys, and Women, mild and gentie Remedies are most  
convenient ; bur-to hardy and robust Bodies, stronger and  
rougher Medicines are best adapted... For as strong and hardy  
Complexions in Health can hear Refrigerants without heing sick,  
so, when disorder'd, they require more powerful Remedies to  
restore them to their natural State;, het Persons of a softer Ha-  
bit experience the contrary, for they bear well enough with  
weak and gentie,’ but are hurt by strong Medicines. Where-  
fore we must carefully weigh with ourselves, and consider-when  
it. may he proper Io increase or remit the Force of any Medi-  
cine, so as that it may be contrary to the Disease, but at the  
same time familiar and friendly to the Patient. We ihall be-  
gin then with, the most simple and weak Remedies, and proceed  
to the stronger, and direct when they are to be used in their  
pure or simple State, find when mixed. . νύ ί

. .. One of the most simple Medicines in. this Case is prepared of  
Honey, and the Juice of Mulberries, and is goed in the Begin-  
ning, or for-any moderate Degree, of all inflammatory. Disor-  
ders of the Tonsds,- Uvula, Fauces, or any of the Parts about  
the Throat, especially in Bedies of a soft and white' Flesh.  
This .Medicine, which we call *Diamoron,* when compounded,  
is goed, not only in the Beginning, but in the State of the In-  
flammation. It is render'd a more powerful DiseussiVe, - by  
heing mixed with Myrrh, as most indeed prepare it in the Be-  
ginning of the Distemper; but it would he better suited to its  
State,. which requires both Digestives and DiscussiVes ; and if at  
tins Time you add a littie of the Antidote called *Diabefas.a,* the  
Remedy will he much inore effectual. . ’

I: When the Heat of the Inflammation is aflwaged, but a fort of  
Hardness remains, it will he proper to add a little Sulphur and  
Nitre ;.-and-if there he any thing of a gross and Viscous Sub-  
stance deeply seated, six Drams of Nitre, and one of Sulphur,  
will be sufficient. - But is the Patient cannot bear so penetrating  
. a Medicine, but labours under an Imbecillity ofStomach, which  
he thinks is subverted by this Topic, the Nitre and Sulphur  
must he left out, and we must he contented with the Addition  
only of the Diabesasa, or Penyroyal, and Origanum, or Gala-  
mint, .or Hyssop, or Pepper; but to preserve the Fauces from  
heing exasperated, there must he a Mixture of the Juice of Li-  
quorice, which will render the Medicine in all respects inno-  
cent, and not the less effectual.. - - '

. - The Composition. of the Diamoron for the Quinsey is as  
fellows:.

«. Take, of the Juice of Mulberries, three Pints; of Myrrh,  
Alum, Ornphacium, each two Drams; of Honey, half a  
Pound: Boil the Juice of the Mulberries for an Hour,  
.and then set it cool, and thicken by Degrees; after this  
add the Honey to it, and boil them again to the Consum-  
ption of Two-thirds; and when they are cool, mix with  
- ’.-them the dry lngredienti

The incomparable *Galen* prepaied this Medicine aster the fed\*  
lowing manner:

Take of Honey, a Pound; of the Juice of Mulberries, two  
Pints and an half; of Saffron, Myrrh, Omphacium, each

- a Dram; of austere Wine, two Pints and an half. If  
Omphacium cannot he had, substitute in its room the  
Juice of Sumach. Let this he first boiled to a strigmenti-

\* tiotis Consistence, and then add the Honey ; after they  
have boiled for some time together, remove the Vestel off

. - the Fire; and, putting in the dry Ingredients, heil them  
well together, tin they are thoroughly incorporated. -

- The prepared Juice of the wild Mulberries is an excellent  
Medicine, and so is the Juice of Quinces; and, sor want of  
thefe, the Juice of wild Pears, Medlars, Damafk Prunes, Ser-  
vices, and wild Plums. These astringent Fruits plainly require  
to he mixed with a goed Quantity os Honey, sometimes dou-  
ble, sometimes triple their vVeight; and all these Medicines  
are friendly to the Stomach, and not at all dangerous, and may  
properly he taken in a moderate Degree of inflammation.  
These Juices may he prepared with the same Ingredients as the  
Juice of the Mulberries.

The Medicine prepared of the Juice of Walnuts is somewhat  
more effectual, as well as what is prepared of Blackberries,  
Pomgranates, and Quinces, which is a Strengthens and Sto-  
machic; - - : *r .*

- The Medicine of Walnuts, called *Diacarson,* is thus pre-  
pared:

. Take the external Rind of Walnuts, while they are in their  
most flourishing State, and pound it in a Mortar ; strain  
the Juice through a linen Cloth, and after boiling it, mix

‘ it with a moderate Quantity of Honey, aS before in the  
.. .; Diamoron, and boil st again to the Consistence *of* Honey.

In this State, without any further Mixture, it is proper for  
Women and Children to take, especially in the Beginning

. .. of the Distemper; is you add Myrrh, it may be used  
'. . when the Disease is arriv'd at its Height ; and with a fur-

ther Addition os Sulphur and Nitre, in the Decline of the  
- same, and where the Aspera Arteria, and its Top,. are

. affected with a Hardness and - Constriction, as. We .said  
. before, ἐν' ' . . -

: Another excellent- and Very effectual Medicine, which has  
saved many Lives, is. thus prepared: si

Take of Orris, Balanstines, Pepper, Saffron, each an Ounce j  
*. Syrian* Sumach, two Ounces; Wine, three Pints; Must,  
. helled to the .Consumption of a third Part; a Pint; Honey,  
a Pound; Alum, an Ounce». This Remedy may be used  
at any time, especially where Heating and Attenuation  
of some stubborn Hardness are required? . ' '

. The Preparation-of *she Diabefas.a,* for malignant and despe-  
rate Inflammations: It is called also *Diaharmala,* from *Harr  
mala,* wild Rue : -

Take of Anise, Seeds of Smallage, Bishop'S-weed, the  
Flowers of common Rushes, Alum, Illyrian Orris, wild  
Rue, each one Ounce; of Cassis, Crocomagma, [Dregs  
of ‘-the -expressed Ointment of Saffron] drsid Roses, each  
two Ounces; IVy, fresh Ashes of young Swallows burnt,  
each three Ounces ; Spikenard, Amomum, each four  
. . Ounces; Saffron,.an Ounce and- an half ; of the Galis  
called Omphacitides, [the small, tuberous, solid sort of  
Galls, *Diofcorides, L.* I. Co I 46.] eight in .Number:  
Pulverize them, and make them up with Honey.

*Aetius* ascribes this Composition to *Andromachus,* and quotes  
him, as saying, that he used it in desperate Qpinseys, and that  
it was also an excellent Remedy for Pains of the Stomach, and  
the Griping of the Guts. His Receipt is somewhat different  
from *Trallian's,* and here follows:

Take Seeds Of Anise, Seeds of Smallage, Flowers Of the  
Juncus Odoratus, Bishop's-weed, pluinous Alum, Illyrian

. Orris, the Seeds of wild Rue, Cinnamon, Trogledytic  
Mynh,. long Birthwort, Cassia, Crocomagma, dry'd

. Roses, of.each. one Ounce ; CostuS\*; Ashes of Swallows  
newly burnt, each three Ounces; Saffron, an Ounce and  
an half; Spikenard, Ainomum, each four Drams ; Galis  
called Omphacitides, eight in Number; Make them up  
with Honey. The Dose is the Quantity of a Bean»  
*Aetius, Tetr.* 2. *Serm. An Cap. asp.*

? .This.Medione may he ufed alone,' if the Distemper he mo-  
derate; and its Strength may. he abated, by mixing with it  
Amylum, or dry'd Roses, or Earth of Crete or Lemnos, or

Barley-meal, or any other thing of that Nature, according to  
Discretion. If a more powerful Remedy he required, in  
Strength may he increased by an Addition of Nitre, Elatcrium,  
(so they call the Juice of the wild Cowcumber) and Swallow’s  
Dong, burnt or not bums. The Meditate may allo he sin-  
proved by a Mixture of the Excrements of Dog?, and much  
Inore by an Addition of human Ordure, burnt or nut burnt ;  
but the burnt is the weakest. But Regard is to he had to the  
Time when we make these-Additions: Thus, for Instance, we  
mix Sal Ammoniac, when not only Repellents, hutDisoutients,  
are required ; and if we and the Root of Bryony, we shell  
make it a far more powerfully difcuffive Medicine -, for Reme-  
dies of this Nature are manifestly wanted, where there is no  
Influx of Humours, but the Inflammation is hard and seirrhous.  
Many have mixed Mustard-seed, prepared as they continually  
eat it for Sauce, with Oxyrnel, and so give it warm for a Gar-  
gle; and then afterwards, by anointing the Parts with Diahc-  
siila, have discussed a fcirthous Inflammation in β surprising  
rnanner. For in every Canfiux of Humours we must restrain  
their -Course; but when they are settled on a Part, we are to  
ufe Discuffives, for fear the Passage of the Breath should he ob-  
structid, and so the Patient be strangled as with a Cord.

You may anoint the Parts to very good Purpofe, if to **the**Diahefasa you add but three things, which heve saved many  
without the Help of Bleeding and Purging, and they are Dogs  
and human Excrements, and Elateriurn het if some abomi-  
nate human Excrements, the other two will suffice, *sor they*. do well with Honey , and where Inunction cannot be per-  
sormed, may be blown through a Quill, with the same Esseds,  
on the Part. That the Dung may not heve a foetid Smell, the  
Dogs are to. feed on nothing but Bones for three Days before.  
To conea the Foe tor of the human Ordure, let a Boy eat  
nothing but boded Lupines, for three Days before, thet bis  
Stools may he well concocted and coherent*., these* Lupines are  
usiially eaten in sinall Quantities, with well-baked Bread  
τκλιβανίτης ἀρτοί]. The Boy’s two first Stools are to he *thrown  
uriay,* and the third preserved ; and after’tis dryin, to he mixed  
with Honey. For the Use of this we have the Authority of the  
very wife *Galas, and Philagulus,* **and** many others of the An-  
taints, corroborated by our own Experience. But the MO.  
perns rejeft human Excrements as an Abomination, and only  
make use of these of Dogs, tat having nothing of a foetid Smell,  
and yofareeffectial to the samePurpofe. But if any he aversealso  
to the Ufe of this, they, may keep to the Litufes prepared of **the**Swallows, [Diachelidonium, the Preparation of which fee shorn  
Attain] and what has Sumach sojr an Ingredient, which *are*admirable Remedies; the former of thefe may he mixed with  
the Preparation of the Juice Of Wainuts; Qbferve, that the  
Diabefasa is not only good in Affections of the Throat, but in  
inany others; for it cures Disorders of the Stomach and Colon,  
and is an excellent Stomachic and Anti-dyfenterlo, when mixed  
. with Album Graecum, or Dog's Dung, which itself cures the  
Dysentery, if it he mixed with Milk in which htated .Sea-peb-  
hies have heen quenched ; and is no less efiectsal in Inflamma-  
tions of the Fauces, Tonsils, and Vvnla, if used with the  
juices of austere Grapes, the Rind Of Walnuts, Cornelian  
Cherries, Acorns of the Ilex, or Services; it is. also properly  
mixed with AEgyptia and Anthem. In the Beginning and In-  
cresse of Inflammations Astringents are plainly indicated ., .but  
when they are come to their, full State, and ought to he diffi-  
pated, Dsscutients are required. Dogs Dung has allo .many  
other Vinnies; for st cures the Aphthis, and old Ulcers which  
arc hard to cicatrize.

If the aforesaid Remedies are not-to be had, wc must make  
ufe of such as follow, which arc both good and easy to he pre-  
pared; . I

‘ Take the Seed of Radish, pulverized in Oxymel, for a. Gar-  
gle : It has a very good Essed by generating Plenty of  
, Humidity.

Another Gargle for the Quinfey, which I use, as did my Fa-  
ther *Stephen* before hie, is thus prepared ι - ' ;

Take of *Egyptian* Thorn, a Dram ; Orris, and Liquorice,  
- each half-a Dram ; Bran of Bread-corn, an Handful;

ow’d Rofes, a sinall Quantity; Dates, fiveor seven : Boil  
them in Wine hell’d to a Consumption of a Third, or Wa-  
ter, and let the Parient take the Decoction, with a very  
little Honey, for a Gargle, to be renew’d every Hour.

A very good Medicine in the State of the Distemper, is the  
sallowing. . -

Take of burnt and washed Brass, a Dam; of red Nitre,  
two Drams: Give them a moderate Boiling in Honey, in  
. . a copper Vessel, and so use them. Wormwood also, and  
‘ Honey, nive great hehes in thisCofc

Another for inveterate Quinsitat that are void of Ulcerations:

Take of Eupholbium, two Drams; of Honey, a Quarter of  
a Pint: Boil the Honey well, and add the Euphorbiurn:  
Make them into Ellis, and give two of them in the Whim  
of an .Egg. They gently loosen the Belly, and prevent  
a Suffocation. This is a very effcctiial Medicine against  
Inflammations, procceding from gross and viscous Hu-  
mours, which are not attended with Ulcerations.

As to Bleeding in the Quinsey, it ought to be used in the first  
place, but not all. at once , for particular Evacuations are fittest  
to draw off the Cause of the Disease from the assecied Part;  
therefore Phlebotomy is to he administer’d three or four tones,  
only taking care to stop the Blond before the Patient saints; for  
.nothing is more improper and dangerous in a Quiofey thanFaint- .  
ing, which is Osten the Caofe of a Confluence of all the Humour,  
inwards. It there he no Relaxation aster Bleeding, hut the Pas-  
sages of Food and Air *[of* the Gullet and Aspera .Arteria] are still  
obstructed, we are nor to scruple cutting the sublingual Veits,  
nor defer it till To-morrow, but do it the fame Day. I myself,  
in a very urgent Cafe, have opened a Vein very early in the  
Morning, cut the Sublinguals at Day-break, and in the Evening  
administer'd a Purge of Scammony in Cremor of Ptisan, and  
with nil these Means had much Difficulty to relax the Strangu-  
lation which the inflammation had caufed. To another, after  
opening the Vein of the Cubit in both Anns, I administer'd  
the same Day ten Grains of the needy expressed Juice of Spurge,  
while it was yet in its liquid Stato, and before Inspissation. This  
is the Method to he uVed with Persons who are of a robust Habit,  
in the Vigour of their Age, and vehemently affectid with the  
Distemper, which gives, no Respite, hist requires immediate  
Help. . I have alfo cut the Jugular Veins when I could not find  
the Sublinqirais, and by that means very much relieved the Pa-  
tient. For a Woman I have open’d the Veins at the Ankles,  
when I understood she wanted her monthly Purgations, which  
was the Occasion of the Disease. Hence she received a double  
Benefit, the Restoration of the Menses to their usual Courfe,  
and Rellef from the Distemper. The same is to he done sor  
Men, of subjeci to the Haemorrhoids.

Cupping is advisable in these Disorders, but it must he ofed  
after the Influx of the Matter has ceased ; for. while it flows *so*the Part, Restringente and Repellents are more proper than  
Drawers. But when the Influx is over, and the Matter wants  
to he difcufled, Cupping and Fomentations are convenient, and  
if ncedful, S Cataplrfm is to he apply’d \* for when thewhole  
Body is free from Recrements of ill Humours, there is no Fear  
Of a new Conflux to the affefled Parts; and it is certagni.that  
Cupping-glasses have the Virtue of attracting the peccant Mat-  
ter, which is the sole Caofe ofthe Danger, from the inner Parts  
to the Superficies. ; : : i

Externally may he apply’d Wool moisten’d with Oil, or  
mollifying Cerates, prepared with Wax,.Butter, and the Fat  
of a Goose.

Cataplasms are to be inch as digest and dismiss Inflammations,  
prepared, for Example, of Barley-meal, Liofeed, and Dates,  
boiled in Water, or Saffron and Crums of Breed boiled toge-  
ther. Beit Cataplasms which only relax, or strongly repel,  
are to he avoided. Is the Inflammation he os pretry long stand-  
ing, and hard, it will he proper to add dryin Figs, Docks,  
dints, and a little Nitre j for the Matter ought to he drawn out,  
and Nature assisted in her Endeavours thet way.

Old and scirrhous Inflammations are proper to he fomented  
with a warm Decoction of Chamomile or Marsh-mallows, to  
winch if you and Bays, especially in cold and stubborn Humours,  
which are deeply seated, the Fomentation will he mutch more  
cstectiral.

AS to Diet, let the Patient's only Sustenance at first he Hye  
dromel, which of: itself produces ail the good Effects thet can  
he desired; for it attenuates and purges both by Stool and Urine.  
It is, in a particular manner, proper to he given in a Defluxioa  
upon the Breast or Longs, or where thofe Parts are oppressed  
with a Stream cness;and there is Reafon to sear, lest an Inflam-  
mation, Peripneutnony, and in some meofure another Cynan-  
che should arise. Give Hydramel till the Inflammation he mo.  
derated, \_ and Respiration more free. Aster the third Day, the  
Patient is to take Cremor of Ptisan, which is no less effectiral  
to all good Purposes than the former, sor it absterges, incides,  
nourishes, and has a Virtue of asswaging the Heat of anInflam-  
anation. When the inflammatory Matter is attenuated, and  
the Heat moderated, the Sick is to he indulg’d with some very  
soft Yolks of Eggs, het not many ; sor the .narrow Passages ate  
soon streighten’d with copious Aliment, and are in Danger of a  
new Strangulation. In this Disorder we are by all means to  
avoid so Inflammation j which is sooner caused bv a free than a  
sparing Dies. *Trallian, Lib.. 4. - s e.*

Of these which are strangled in this Distemper, we give  
over all Hopes, when the Fmth appears about their Mouths,  
relying upon the Opinion of *Hippocrates.* Others are recalled  
to Lise by instilling Vinegar and Pepper, or the Seed os Nettles  
bruised in very strong Vinegar; but as they will not receive  
them without much Difficulty, they must be compelled When

.the Redness about the Neck is dispell’d, they immedinfely look  
tip, and are relax'd. The same Means are to he Used sor those  
.who are shipwreck'd; and, in shors, for all who aro under  
. Suffocation, to revive the natural Heat. *P. Aiainet. Lib v  
Catista- .*

The Method of treating this Disease varies according to its  
different Species, and the Causes of each; to the Knowledge of  
which, in order to their Removal, the Physician rs to direct all  
his Intentions. AS soon therefore as it is known by manifest  
Signs, that there is a Congestion of the Blood in the Head,  
which does not only increase the Inflammation, hut is also the  
Cause of satal Symptoms, the Physician’s first and immediate  
Care is to divert the Impetus of the Blood from the Part affect-  
ed, winch is most conveniently done by opening a Vein near  
. it; for, in this Remedy, Physicians of all Ages, both antient  
and modern, have placed their principal and almost only Hope  
.of relieving the Patient. Let *Hippocrates* speak for all, who, in  
hrs Book *de Loc. in Hom. Sect.* i. thus directs the Cure of a  
Quinsey: They who are affected with a Quinsey from Blood  
." collected and coagulated in the Veins of the Neck, are to  
" he blooded in the Arms and Feet; and at the same time to  
." he evacuated by Stool, in order to divert and draw off what  
es feeds the Disease." But where, and after what manner,  
this is to he done, all are not agreed. There are a great many  
who advise opening of the Veins under the Tongue; which  
others reject, because if the Orifice he not made wide enough,  
but little Blood comes out; from a wide Orifice proceeds an  
Haemorrhage, which is sometimes known to prove satal. Among  
those who despise it, *Tulpius* is one of the chief, and sor this  
Reason, because the Blood is hereby drawn to a Place narrow of  
itself, and a Suffocation easily induced. Others, as *Zacutus  
Lusitanus, Hist. Med. princ. Lib.* I. *Hist. foe. Job. Steph, in  
Hipp. de Struct. Hom. Trallianus,* and *Frtind* in his Commen-  
taries on the Epidemics of *Hippocrates,* are extremely zealous  
sor opening the external Jugular Veins; especially in a desperate  
Disease, and where there is present Danger os Suffocation.  
Some commend Scarification on theNape os the Neck, and the  
Chin, as *Platerus, Amatus Lusitanus,* Z*acutus Lusitanus. Rio-  
lanus* would have it done about the Larynx. *Capivaccius* and  
*Hollenus* are for applying Leeches behind the ears, and on the  
Neck. . .

Aster Phlebotomy, according to the Advice of *Hippocrates,*the Belly is to be purg'd, by which means the Humours may  
he attracted to the lower Parte, and evacuated: And this is to  
be effected by Cathartics, not at all acrimonious, or in the  
Form of Powders or Pills, but of the milder Kind, and in a  
liquid Form : But that we may answer two Intentions at once,  
that is, draw off the superfluous, and at the same time attem-  
per and sweeten the acrid and salt Humour, it will be Very pro-  
per to prescrihe a Decoction of two Ounces of Manna, and a  
. Dram and half osantimoniated Nitre, in ten Ounces os Whey.  
If nothing can he received by the Mouth; a Clyster must he  
given, made of Milk, Honey, OU of sweet Almonds, com-  
mon Sals, and Nitre. . . . .

The superfluous Blood, and impure Humours, bring thus  
evacuated, we are next to direct our Endeavours to the Re-  
solving of the sanguineous or. serous Humour that staffs theVes-  
seis, by proper Remedies, both internal .and external, which  
may at the same time allay the feverish Heat. Most conducive  
to this Purpose, is the frequent Use of a diaphoretic and gentiy  
anodyne Mixture of antispasmodic -and perspirative Waters of  
the Flowers of elder, the Lime-tree, Cowflips, Acacia, Goat's-  
rue, os the Herb Carduus Benedictus, Scordium, [Water Ger-,  
mander] with Diofcordium,-diaphoretic Antimony, and Sal  
Pnmelhe, Vinegar also, with Crabs-eyeS, and the Syrup of the  
Ied Poppy. Very proper allo are moistening and diluting  
Drinks, indulged in good Quantities, such as Whey, sweet and  
sourish, and prepar'd with rhe Juice of Lemon and Sugar, Ptisan  
of Barley cleansed, the Root of Scorzonera, and the Shavings  
of Hartshorn, with the Syrup of Lemon-juice, Water-gruel,  
and Milk itself, if mix'd with an equal Quantity of Water,  
and some Sugar, and a littie Nitre.

In so dangerous a Distemper aS the Quinsey, we are also to  
relieve the Patient, as much as possible, by Topics, applying  
some to the Inside os the Mouth, others, externally to the Neck  
and Throat, that, by these means, the Pain and inflammatory  
Heat may he mitigated, the Acrimony of the Humours attem-  
per’d, and the Juices, which stick last in the narrow Passages of  
the Veffeis, may he dissolved. The most common Topics are.  
Cataplasms of paregoric and discussive ingredients, aS the Flow- .  
.ers of Elder, Melilot, common Chamomile, Mullein, the  
Roots of white Lillies, Figs, Saffron, the Seeds of Anise and  
Fennel; theMeal of Lin-feed, boil’d in Milk; to which some  
add, as Specifics, Swallows Nests and *Album Graecum.* Usefid  
also for this Purpose are lenient and emollient Plaisters, aS Dia-  
chylon Simplex, or a Plainer of Melilot, mollify'd with Oil of  
sweet Almonds; or render'd more efficacious by a Mixture of  
Sperma Cori, Saffron, and Camphine. I am not fond of ad-  
. vising Gargari sins, or syringing the Places where the great Pain,  
with the burning Heat and Dryness, lies. It is sufficient, now-

**and-then; to wash the Mouth with some proper warm Τduratis,  
winch** may he prepared of several things, as with Rob Dianu-  
cum, Dramoron, bynip of the sweet Juice of Pomgranates,  
.of red Poppies, of Violets, Mucilaoe of Quince-seedS, Cream,  
Sal Pnmelhe; any of which, aS Circumstances shall require,  
**may he** mix’d with Milk, a Decoction of Liquorice, or of Figs;  
or with Water-gruel: Nor is there less Virtue in the fresh Oli  
**of** sweet Almonds, mix'd with Sperma **Ceti,** Saffron, and Syrup  
of Violets, infused in Water-gruel and held a while in the  
Mouth.

**CLINICAL CAUTI6NS *and* OBSERVATIONS.**

In a sanguine Quinsey, and plethoric Body, the Cure must  
begin with Bleeding, which in this, if in any Distemper, deli-  
Vers from immediate Danger of Death ; but we must he quick  
with our Assistance, for we have not a Moment to spare. The  
Patient finds most Relief by opening the Jugular Veins; but if  
this be impracticable, the Veins under the Tongue must he cut,  
taking care first to open a Vein in the Arm. When a sanguine  
Quinsey comes upon a burning and *Hungarian* Fever, and there  
is Danger of a Phrenfy, but not Strength enough to bear the  
Loss of much Blood, the sublingual V eins are however to he  
Open'd with all Speed : But when the Disorder owes its Rise to  
a caustic Acrimony, inherent in the nervous Membranes os **the**Fauces and Larynx, and there is no manifest Redundancy of  
Plood, Scarification of the hinder Part os the Neck or Chin,  
or Application of Leeches, are rather indicated. And in caco-  
chymical and phlegmatical Constitutions, when, from the Plen-  
ty os Viscid Serum, a Tumour, with a Pain and a gentie In-  
flammation, affects the Fauces, and the external Parts of **the**Neck, Scarification on theNape of the Neck, and the Scapulae,  
is to be preserr'd hefore Phlebotomy:

In the Use of Topics, due regard is to he hed to the different  
Rinds of Inflammations in the Fauces, and proper Remedies  
are to be accommodated to each Kind: - Thus, in every painful  
and hot Inflammation os the Fauces, a Julep of Roses, with  
Nitre and a little Camphire, swallow'd, is os excellent Service.  
Also Jelly of Hartshorn, with the White of an Egg, well de-  
purated, and the Juice of *China* Oranges, and sweeten'd with  
Sugar, repeated frequently, are of wonderful Relies. Is the  
Fauces are dry, and parch’d with Heat, the Tongue swell'd,  
and there is a Difficulty os Respiration, as well as Deglutition,  
a Linctus is to he prepar'd, with two Ounces of the White of an  
Egg, beaten in Water, one Ounce of Rose-water, Syrup of  
Pomgranates, and Diamoron, of each half an Ounce, and Sal  
Prunellas, twelve Grains; with these, according to the Condi-  
tion of Circumstances, twenty or thirty Drops of some anodyne  
Liquor may he mix'd : Outwardly the Neck, hefore and be-  
hind, is to he anointed with camphorated Oil, prepar'd of one  
Ounce of the Oil of sweet Almonds, two Drams of the Oil of  
white Poppy, and half a Dram of Camphine.

In the internal and occult Quinsey, attended with a violent  
Heat, the Mouth is, now-and-then, to he wash'd with Milk  
only; and itsCream, with an Addition os Sal Prunellas, and  
Syrup os red Poppy, and Whey, is to he frequently drank. In  
an Inflammation of the CEsophaguS, which is often accessary, to  
a malignant Fever, when come to its State, whet is commonly  
used is a Powder made of a Drain of .Nitre, three Grains of  
Camphire, and an Ounce of Sugar, together with an emulsion  
of sweet Almonds, to he both token inwardly, and outwardly  
to he held for’some time in the Mouth. And when there is  
any Danger of Suffocation, from receiving inwardly the acrimo-  
nious Exhalations os Metals, Minerals, Quicklime, and Mer-  
cury, there is no room for Bleeding or Purging in such a Case ;  
but the fittest Remedies are Moisteners and Demulcents, both  
internal and external, as Milk and Nitre, the Cataplasms hefore-  
mention'd, and Clysters.

The inflammatory Pain, caused by the *salt* acrimonious Se-  
rum, in the glandulous Flesh of the Fauces, near the Precincts  
of the Pharyx and larynx, with a Redness and copious Saliva-  
tion, without a Fever, is best discuss’d in the Beginning, by  
immediately taking a Gargarism of Spirit of *Rheniso* or *Fran-  
conian* Wine. The present effects of this Remedy are attested  
by *IPalaeus, Method. Med. p.* i I 2. " Let him who is affected  
" with a Quinsey, says he, gargarize himself in the Beginning  
" with Spirit of Wine, and all the Inflammation will cease in  
V the Space of three Hours, whether he uses it by itself, or  
" mix'd with other things-'' And, for this Reason, *Martianus*commends, in a true Cynanche, things which are actually het:  
And I myself heve known an Inflammation of the FauceS dis-  
cuss’d in a short time, by gentiy passing down the FauceS eight  
or ten Drops os Spirit of Wine camphorated, in which a Grain  
of Nitre has been dissolved. Sortie recommend, for this Purpose,  
Essence of white Burnet, made with Spirit of Wine.

When a great Load of impure serous Humours oppresses the  
Glandules of the Palate and Fauces, the milder Laxatives are to vhe frequently used, such as those prepar'd with Manns, Rhu-  
bath, Tartar, and Raisins of the Sun, and Currans. There is  
also an excellent Gargarism for this Purpose, which has for its  
Basis the Sal Pharyngeum, described by *Zobelius* in his *Tartaro-*

*lsua:* It is prepared Of an Ounce of Cremor of Tartar and  
Nitre, with half an Ounce of burnt Alum, dissolved in distill’d  
Vinegar ; and this Solution is afterwards to he coagulated ac-  
cording to Art. A Dram of the Salt thus prepar’d, with two  
Drams of Honey, is to he dissolved in five Ounces of Plantain-  
water ; and with this Liquor the Fauces are to he often wash’d,  
and the same is to he now-and-then injected with a Syringe.

In inflammatory Tutnors of the Fauces and Glandules, the  
mollifying Pleisters above prefctio’d heve justly the Preference  
hefore Cataplasms, which, on account of several Difficulties, I  
seldom ufc; but more frequently make ofc of a Decoction of  
Emollients made in Milk, and kept in a Bladder. But aS to -  
the Use of Gargarisins, observe, thet they are not to he injected  
with a Syringe; for the too vehement Attrition of the Parts by  
this Methnd' would the more exasperate the Pain and Mam.  
mation. It is therefore the better and safer way to wash out  
the Mouth, now-and-then, with the Liquor appointed for a  
Garaarifm : But if even this, by reason of Weakness, cannot  
he eiFecied, the injection is to he forced in the most gentle man-  
ner, lest there should he an Irritation to vomit; the Hced alfo  
is to he hent forward, and not backward, for fear the Liquor,  
by flipping wrong, should pass into the *Aspera Arteria,* and  
endanger Suffocation; and if there he a great Quantity of  
Mucus inherent in the Parts, the Injection is to he renew’d.  
Moreover, in all thefe Affections of the Fauces, it is best to  
abstain from fpeaking, becaufe the frequent and strong Agitation  
of the Tongue exasperates the Disease.

: If the Tumors of the Fauces tend to a Suppuration, the  
same may most commodioufly he promoted by the Application  
of fat dry’d Figs : And when the inflammatory Tumor of the  
Tonsils is full of Ichor, I find no external Remedy better than  
Honey of Rofes, mix’d with Spirit of Vitriol, and often applied  
with a Pledget; it lessens the Tumor, deanfes it, prevents any  
further Afflux, and dissolves the Phlegm already about the Parts.  
In the Aphthis of Infants, which beset the Tongue, and are  
attended with Pain and Heat, there is nothing hetter to mitigate  
them, than, now-and-then, to anoint the Pustules with Cream,  
with a little Nitre. Sometimes it wlll he convenient, in order  
to diseufs the Phlegm, and restrain the Afflux of the Humours,  
to apply white Vitriol dissolved in Rain-water, or, what is bet-  
ter, Rofe-water, Or Elder-flower-water.

That the Inflammation of the Fauces may nut return, as it  
often happens, we must carefully avoid Iuch things as we said  
hefore were dispos’d to induce it. Perfniration especially must  
he maintain’d, and ’tis goad to defend the Head, Neck, and  
Shoulders, from all Refrigeration, thet the Humours, and acri-  
moninus Matter, which ought to pass off thro\* the Pores, and  
he difperfed, may not he repell’d inwardly, and take up their  
Settlement in the *soft* Substance of the Fauces. Beware also of  
every thing, thet may put the Juices in too great an Agitation,  
.and especially of Vociferation, and hrgh-straining the Voice, by  
which the Humours are attracted to the upper Parts. If the  
Body be plethoric, seasonable Bleeding must he administer'd;  
and if spontaneous Haemorrhagesobserve not then statedTimes,  
Or fail in other respects, they must he regulated, and reduced to  
Order. Nor is lefs Care to he taken to keep the Belly soluble,  
by taking now-and-then a gentle Purge, by which Impurities  
may he cany’d off, and their confluent Motion upwards may be  
intercepted.

Histories of **CASES.**

**CASE I.**

. A Woman, thirty Years old, choleric, and very subject to  
Rheums and Catarrhs, rofe out of her Bed in Autumn, thinly  
cloath’d, and carelefly exposed herself to the cold Ain. By th»  
means she contracted a Hoarfeness, with a burning Heat and  
Pain of the Throat, Io thet she could neither swallow nor speak  
without Difficulty; and her Pulse, especially in the Night, was  
quicker than it ought to his Her Menses having ceased, she  
was first blooded in the Arm, and then had a Clyster admini-  
steSd, but received no Relief; as sor Gargarisins, so great were  
her Pains, she could not bear them. Mean while, the Tumor  
of the Throat, both internal and external, extremely increas’d,  
and to such a Degree as to want but little of strangling the Pa-  
dent ; but it subsided a little on the fifth Day, and the Pain  
was mitigated. At this time was outwardly applied to the  
Neck a ripening Plaister of Melilot and Saffron, on which were  
laid war m Rag., and her Mouth was wash’d with a Decoction  
of Emollients. By these means the Tumor was brought to  
Maturation, and happily broke in the Night, unknown to the  
Patient; but the acrimonious Matter was certainly fallen down  
upon the Lungs, and seemed to threaten Suffocation. To re-  
medy this, was prescrib’d Hyssop-water, with Essence of Castor  
and Liquorice, with an Addition of some Drops of Spirit of  
Hartshorn, prepar’d with Amber; also an Infusion *of* the pecto-  
ral Heths in het Water, aster the manner of Tea r Upon this  
a Sweat broke out ever all her Body . and at the fame tone a  
tough, vifcid Matter, six times at least in a Day, came off by  
Stool, not without griping Contractions of the Belly. But the  
Physician, being apprehensive, thet this Diarrhoea might he hurt-

ful, consider'd hew fo suppress it j and for thet End ordered an  
Electuary of Diasoordinm, Conserve of' Rofes, the Powder  
of the Hwmatitcs, and Nutmeg. The Looseness was imme-  
diately stopp’d, but was succeeded by Hickups, wish a burning  
Heat in all the Region of the (Esophagus, a Spitting of vifcid  
Matter, and a Decay of Strength. Under these Circumstances  
another Physician was consulted, whojudged thefe Symptoms to  
procced from the wrong and injudicious Suppression of the Flux  
of the Belly; wherefore he prescribed Pills of choice Myrrh,  
Diagrydiutn sulphurated, *Mercurius dulcis.* Saffron, Castor, and  
Salt of Amber, to he taken in a hot Vehicle. By these means  
the Hickups were not only cured, but the Excretion of ferous  
Matter by Stool was recall’d, to the great Relief of the Patient,  
who afterwards by degrees recover’d her Health.

. REFLECTION.

It is very remarkable in this Case, that the Inflammation of the  
Fauces had a Solution by the ferous and pituitons Flux of the  
Belly; thet the preposterous Restraining of this Flux occa-  
sion'd grievous Symptoms, which vanish’d at its Return:  
But very often, in inflammatory Affections of the Fauces,  
the (Esophagus and the Stomach itself are affliSed, so thet  
they seem to labour under the same Distemper. Of the  
*Aphtha* I have often observed, thet they infest the CEsopba-  
gus and the Stomach, which appears from that burning Heat  
which runs through the (Esophagus, and reaches even to the  
Diaphragm. Under this Circumstance the Patient can by no  
means suffer any thing that is fair, acrid, or hot; but finds  
Relief from Barley-broth, Water-gruel, and Infusion of  
dried Turneps, aster the Manner of Tea, with Milk; by  
which means the Heat, Dryness, Pain, and Anxiety about  
the Diaphragm, heve been removed. On the other hand, I  
heve known, that when the Stomach has been inflam’d in  
burning Fevers, by Poisons, or by forne of the more acri-  
monious Cathartics, the Inflammation has heen propagated  
to the Fauces, and the Mufcles of the Larynx, Hence we  
may take it as an establish’d Truth, that in Affections or the  
Fauces and Mouth, especially if they are infested with a vis-  
cid and thick Phlegm, laxative Medicines afford prefent Re-  
’ lief. ... : . . - -

**. . CASE II.**

A Man, sixty Years of Age, had heen long afflicted with a  
Quartan; and aster he was cured, hecame very fubjeci to Cai-  
tarrhs, and Weakness of the Stomach. After travelling in a  
rainy Night he sell into a Disorder of the Fauces, in such a  
manner, that he could swallow solid Fond, but not Liquids,  
without much Straining, Anxiety, and a subsequent copious  
Excretion of Phlegm, inwardly the Fauces appear’d some-  
what red, but nothing of a Tumor could be seen outwardly.  
We judged therefore, thet the Epiglottis, which, hike a Lid,  
covers the Orifice of the *Aspera Arecria,* was embamis’d and  
turgid with a mucous Serum,; and by that means render’d inca-  
pable of exactiy closing the fubjedled Orifice: Hence, in Deglu-  
tition, the Liquids flipp’d into the *Aspera Arteria,* which was  
the Cause of the subsequent Anxieties. Upon this Account, I  
Order’d, Outwardly, an Application of Spirit of Wine campho-  
rated ; and inwardly, for the Mouth, a Collution of Water of  
Elder-flowers, mix’d with Spirit of Sal Ammoniac, and Essence  
of Saffron, to be used now-and-then; and my Pills to he taken  
every Day *(of Aloes with Balfamicssc* By thefe Remedies the  
Disorder was happily removed in a sew Days, and the Patient  
recover’d his Health.

REFLECTIO N.

The proper Symptom of a Quinfey is, a Difficulty of Degluti-  
tion, as well with refpecl to Solids as Liquids ; for if a pret-  
ty large Tumor affects the Beginning of the CEsophagus, and  
contracts it, then Liquids, but not Solids, may he transmit-  
ted through it; but if the Tumor be seated in the Beginning  
of the Throat, which is cover’d by the Epiglottis, solid Sub-  
stances, by compressing the tumid Epiglottis, find a Way to  
. the (Esophagus ; whllc Liquids, hot pressing with the like  
Force as the others, fiide through the gaping Space; by the  
Tumors, into the *Aspera Arteria,* and there occasion great  
Molestation.

**.CAsE In.**

A Woman was thought by the Physicians to he infectsd with  
*the Lues Venerea,* upon which Presiimption they had order’d  
her to he salivated with Mercury: From thet time, upon every  
flight Occasion, as from cold or soggy Air, a Fit of Anger,  
acrimonious Meats, Refrigeration of the Herd, or some Irrc-  
Klarity in the Menses, she would he seiz-’d with an exquisite  
in, and burning Heat, in the internal Parts of the Fauces,,  
about the Larynx and Pharynx, with a Difficulty of Refpira-  
tion, but without a Fever. Now it happen’d, that this Wo-  
man slept in a low Chamber newly built, and full of the Va-  
pours os Lime; whence she was taken not only with a Pain  
in the Head, but a vehement Heat and Pain in the Fauces and  
Neck, with Restlesthess, Stmightneiss of Breach, Ankiery, and

.Tossings. Being call'd to attend her, I omitted Bleeding, be-  
**cause** there was no Redundancy in the Vessels, and only order'd  
a Cataplasm to he applied to the Neck, prepar'd of Meal of  
**Tin-**seed, Flowers of Elder, Figs, Saffron, Oil of sweet Al-  
monds, and Milk. I advised also a Clyster of Milk, Nitre;  
common Salt, Honey, and Oil For Drink, I allow'd Milk,  
min'd with half the Quantity of Barley-water, or Ptisan, with  
an Addition of a proper Quantity of Nitre, or Syrup of Violets:  
Of this she drank plentifully, and often held it in her Mouth.  
By these means the Disease in a short time was discuss'd. To  
prevent her frequent Relapses, I advised the Drinking os the  
*Spans,* or the *Seltcran* Waters, with Milk, for a Month or more ;  
and every Day, in the Morning, either to gargarize the Fauces,  
**or m** wash them with the *Aqua Sclopetaria, (Eau FArquebu-  
fade)* or **a** Decoction of Plantain in Wine.

**REFLECTION.**

A Qpinsey is very speedily produced, when the fibrous, glan-  
r . dular, and tubular Compages of the Fauces, is weaken'd and

deprived os its Tone, winch is frequently done by a mercu-  
rial Salivation: For this Reason, those who have once or twice

. labour'd under aQuinsey, which has not been carried off hy  
*: proper* Means, and a due Regimen, Very readily sail into the  
. same Disorder again, by raising their Voice too high. Excess  
- Of Passion, or of Wine, or by drawing in a cold moist Air:

Bur Relapses are most effectually prevented by a speedy and  
t **perfect Cure,** which leaves the Parts free from all Taint.

**CASE IV.**

**I** knew ait honest Man, upwards of fifty Years old, os a sans  
imine, melancholic, but robust Constitution, who had never  
**any** Blood taken from him, but enjoy'd an excellent State of  
Health, even tho' addicted to the drinking of hopp'd Ale, and  
spirituous Liquors: This Man, happening to he put into a Vio-  
lent Passion by his Wife, was seiz'd with an exquisite Pain in  
his Head, the Arteries of. winch became turgid, his Face red,  
and his Eyes stern; in fine, his Nights were pass'd without  
Sleep, and his Arteries beat *so* strong, that he complain'd of a  
painful Sensation, resembling the Beating of a Hammer, in his  
Head; Upon this; a Cataplasm made of the Crums of Bread,  
Bay and Juniper-berries, with Vinegar of-Roses, was laid to  
his Head ; and, by the Advice of an old Woman, the Whim of  
an Egg, beat up with Alum, was applied to his Forchead and  
. Temples. The Patient; having ufed these things for some time,  
complain’d at last *os* an exquisite and pricking Pain of his Fauces,  
a Difficulty os Deglutition, and a Shortness of Breathing; his  
Tongue swell'd prodigioufly; and became blank: He thrust his  
parch'dTonghe out os his Mouth, and had an insatiable Craving  
after Drink; the Pulse in his Arm was quick and Vehement.  
For removing these terrible Symptoms, the following Method  
was used with Success; He was blooded plentifully, and had a  
pretty sharp Clyster injected; A Cataplasm of Dog'S Dung,  
Swallow-nests, Figs, roasted Onions, Elder-flowers, Chamo-  
mile, Melilot, Cummin-seed, Nitre, and Camphire, with  
Elder-fiower-water and Wine, was applied warm to his Neck;  
He used internally a Mixture of Elder-flower and Rofe-water,  
of each two Ounces; distill'd Vinegar; six Drains; of Crabs-  
eyes, one Dram; Nitre; half a Dram ; Camphire, four Grains,  
dissolv'd in Oil of sweet Aimonds; and a sufficient Quantity of  
Julep of Roses, given pretty often, in the Quantity of fome  
Spoonfuls; and. for his ordinary Drink, an Infusion of Male  
Speedwell, Elder flowers, and Liquorice-root; by which means  
**the** Danger of Suffocation was happily carried off. Afterwards  
a laxative Preparation of folutive Syrup of Roses; Cream of  
Tartar, Diagtydium, and Rhubarb, was administer'd; winch  
gave him a Stool each time. His Mouth also was frequentiy  
wash'd with Rain-water, in which a little Nitre and Vitriol had  
heen dissolved, and to which aS much Sugar was added aS ren-  
der'd It palatable: By these means this dangerous Disease was, in  
a short time, throughly carried off

**R Ε F L Ε C TI O Ns .**

The Origin of this terrible Disorder justly claims onr greatest  
\* Attention; for it proceeded from a Congestion of Blood in  
the Head. The external Applications for that Disorder were  
Astringents; by these 'the Bleed-was driven inwards, and-  
towards the Fauces themselves: Here the Blood, bring col-

- lected in **a** great Quantity, ceased to flow, and brought on  
the Heat; and all the Train of other Symptoms; for that **the**

' White os an Egg, beat up with Alum, is a strong Repel-  
lent and Astringent, is plain from its Use in Disorders of **the**

. Eyes; and that, from a Constriction Of the external Parts,  
r the Conveyance to the internal is easy, is plain from the mu-

tual Communication of the Vessels: But the Cure could not  
sail of Success, when the Stagnation was encounter'd by  
- Bleeding, and by internal as well as external Discutients;

for is Opportunity is ever speedily m he embraced, 'tis cer-  
tainly in inflammatory Congestions, which, unless speedily

- removed, degenerate into a sphacelous and deadly Corruo-  
. tion. - *Hoffman. Medicin. Rational. Snstemat. ' -*

**CAsE'sejin HiLriArrUs.**

Last Autumn MU *fohn Merulam, a. -Clergyman os great  
Learning and Worth, was, sot two* Months sorTessivr-ly, afflict-  
ed with a violent Dysentery ; from which when he was almost  
recover’d, he was, during my Absence, seiz'd with a new and  
Very terrible Disorder: For Nature being in him weaken'd,  
heth by the Distemper itself, and his great Age, (for he was  
now past Sixty-fix) could not drive those Puffales, which gene-  
rally appear on the Lips towards the End of the Disease, so sar ;  
hut threw them out about the Uvula and Root os the Tongue;  
with Very considerable Pain and Inflammationi Whilst Mat-  
ters fined thus, he took the Advsee of a foolish Bather, who  
three or four times a Day blowd Powder of Pepper and Saffron  
into his Throat and .Fauces ; upon which the Pain, Inflamma-  
tion,'and Fever, were augmented, and saining Fits seiz'd him  
at certain Intervals. Then, in order to dispatch the Patient **the**more speedily and effectually, he gave him a Medicine which  
operated heth by Vomit and Stool, and which, fromtts Effects,  
I conceived to be Antimony. I, being call'd, went to him with  
all imaginable Haste, but sound him as is in the Agonies of  
Death ; for he could scarce breathe, and his Inquietudes were  
Very great. . His Tongue also and Fauces were so swell'd, that  
he could neither breathe, nor swallow a little Broth without the  
.greatest Pain, accompanied with involuntary and convulsive  
Agitations of his whole Body. . ......

I cured him in the following manner: First, I order'd him  
to wash his Mouth and Fauces with Milk, just come from **the**Cow; he also wash'd his Mouth, now-and- then, with Barley,  
Rose, or Scabious Water, mix'd with Honey of Rosea: He  
every Hour also took a little of the Oil of sweet Almonds. **We**also, three or sour times a Day, and as often by Night, anoint-  
ed his Throat, Neck, and Breast, |wi th Oil of white Lillies and  
sweet Almonds, and applied warm greasy Wool to them. We  
also, by means os Clysters, drew downwards the Matter which ’  
the immoderate Pain, had drawn to the affected Parte ; and aster  
treating him in this Matter for about the Space os thirty Hours,  
an Impostumation broke in his Fauces, from which he discharg'd  
**a** purulent Matter by his Moutin .. . . . ..

Upon this his Pain was immediately lessen'di and he began  
Io breathe more freely, and sup a little Broth: Then by wash-  
ing his Mouth frequently with Barley-water, and sometimes  
taking a little Honey *os* Roses; and by using a proper Regimen;  
and restorative Medicines, he was at last, thro' the Blessing of  
God, restored to Health in a miraculous Mannes, and beyond  
the expectation of all that were acquainted with his Situation.  
And tho' he is now in the seventieth Year of his Age, he never-.  
theless enjoys a good State of Health, and discharges the several  
Offices of his Function with Applause to himself, and Advan-  
tage to the Church. - *Hildanus, Cent. 4. Observat.* 27. . .,  
1. The Sentiments and Practice of out Countryman Dr. *Syden-  
ham* must not he omitted ; it must be observed, that his Prac-  
tice corresponds ‘ pretty exactly with that of *Hippocrates,* and his  
Transcribers.. .....

i. This Disease comes at any time of the Year, but especial-  
ly between Spring and Summer: It principally attacks the  
Young and Sanguine, and also red-hatrfd Persons. It begins '  
(first) with a Chilness and Shivering; (secondly) a Fever sue-  
Ceeds; and (thirdly) immediately after, a Pain and Inflammation  
of the Fauces, which, without speedy Relief, hinder Degisti-  
tion, and prevent Breathing thro' the Nose; whence Suffocation  
is endanger'd from the Inflammation and Tumor of the Uvula,  
Tonsillae, and Larynx. This Disease is extremely dangerous,  
find sometimes kills the Patient in a sew Hours; that is,, when  
a large Quantity of the febrile Master is thrown upon the above-  
mention’d Parts, and the approaching Tumult is not timely  
chough.prevented by proper Remedies. -

2. Inorder to the Cure, I immediately bleed plentifully in  
the Ann, and presentiy afterwards in the Veins under the  
Tongue; and then I order the inflamed Parts to he anointed  
with Honey of Roses, strongly acidulated with Spirit of Sul-  
phur ; and preserihe a Gargarisin to be used, not in the com-  
mon way, but to he held quietiy in the Mouth till it grows  
warm, and then spit out; and this to he repeated between  
whiles. *The Prescription for lhis Gargarifoe is fpecis.fld in the  
last Paragraph of the Article kLEsstAEB, which see.*

I also order the-sollowing Emulsion, or the like, to he taken  
daily: ........ '-

**Take seven** blanch'd **sweet** Aimonds, the Seeds of Melons  
and Pumpions, of each half an Ounce; the Seeds of white  
Poppies,, two Drams;-beat them together in a marble  
Mortar-; then pour on, by degrees, a Pint and half of  
Barley-water; mix -them well, and, when strain'd, add  
two Drams of Rose-water, and half an Ounce of white  
Sugar: Let four Ounces he taken every fourth Hour. '

*Tins would be much better with an Addition of Nitre. - . ' .*

3. I bleed again in the Arm the next Morning, unless tho  
Fever, and Difficulty of swallowing, he in some measure a hared .  
in winch Case I give a gentie Purge, much Experience haying  
taught me, that this is ingbly necessary and ufefid after Bleed-

Ing. *If the* Fever, and other Symptoms, threaten Disturbance  
even aster purging, which yet seldom happens, they are to he  
dieted by repeated Bleeding, and applying a large and strong  
ipispastic **between** the Shoulders. During the whole Course os  
the Disease, **a** Cooling and emollient Clyster must he given **every**Morning, except on the purging Day. i

4. I injoin a total Abstinence from Flesh, and Broths made  
thereof; allowing Barley-broth, Water-gruel, roasted Apples,  
and the like, for Diet; and Ptisan and small Beer for Drink.  
The Patient must likewise sit up some Hours every Day ; for  
**the** Warmth of **the** Bed increases **the** Fever, and its Concomi-  
rants, which I endeavour to Conquer by this Meshed. *Syden-  
ham.*

*Of* **BRONCHOTOMY.**

As Bronchotomy is principally of Use in n Quinsey, I shall  
chnse to give a particular Account of the Operation in this Place,  
rather then under the proper Article.

*. Paulus is,* according to Dr. *Freind,* **the** first Author who  
describes the Operation of Bronchotomy. Our best Surgeons,  
says he, have described this Operation ; *Antyllus* particularly  
thus. We think this Practice useless, and not to he attempted,  
where all the Arteries and the Lungs are affected ; but when  
the Inflammation lies principally about the Throat, the Chimind  
**the** Tonsiis, which cover the Top of the Wind-pipe, and **the**Artery is unaffected, this Experiment is Very rational to pre-  
vent the Danger of Suffocation. When we proceed to perform  
*it, we* must cut thorough some Part of the Wind-pipe, below  
**the** Larynx about **the** third or fourth Ring ; for to divide **the**whole would .he dangerous. This Place is the most commo-  
dious, because it is not cover'd with any Flesh, and because it  
has no Vefleis near it. ' Therefore bending the Head of the Pa-  
tient backward, so that **the** Wind-pipe may come more for-  
ward to the View, we make a transverse Section hetween two  
**of** the Rings; so that in tins Case, not the Cartilage, but **the**Membrane, which incloses and unites the Cartilages together,  
is divided. If the Operator he a littie fearful, he may first di-  
vide **the** Skin, extended by a Hook ; then proceeding to **the**Pipe, and separating the Veffeis, if any are in the Way, he must  
make the Incision. Thus sar *Antyllus. Paulus* adds. That **he***(Antillus)* thought upon this Way of Cutting, by observing  
(when it was, I suppose, cut by chance) that the Air rush'd  
through it with great Violence, and that the Voice was inter-  
rupted. When the Danger os Suffocation is over, the lips of  
the Wounds must he united by Suture, that is, by sowing the  
Skin, and not the Cartilage ; then proper Vulnerary Medicines  
are to he applied. If these do not agglutinate, an Incamant  
**must he** used. The same Method must be pursued with those  
who cut their Throat, with a Design os murdering themselVes.

*Heistcr* gives the following Account of this Operation. What  
he observes with respect to People just drown'd, din os Impor-  
tance enough to deserve Regard, aS it may possibly **save the**laves of many, if properly practised.

The Words Bronchotomy, Laryngotomy, and Tracheo-  
tomy, are Convertible Terms, and mean no more than an In-  
cision of the Aspera Arteris, or what we commonly Cail **the**Throat; and, indeed. Various are the Causes and Reasons  
which may render this Operation necessary ; for, in the  
first Place, it becomes principally and indispensably so, when, in  
a Quinsey, the Fauces are so terribly inflamed, that the Pa-  
tient is in imminent Danger Of having his Respiration quite  
flopp'd, and a thorough Suffocation brought on. Secondly, It  
hecomes neceflary, when a Bean, a Prune, or Cherry-stone, a  
Pea, little Stone, or any other foreign and adventitious Sub-  
stance, salis into the Aspera Arteria, and seems to threaten a  
Suffocation. Thirdly, The Aspera Arteria may also he open'd  
in such Persons as have heen suffocated, in consequence of their  
having been immers'd in Water, or, as we express it, in newly  
drown'd People. For sometimes a Power of Breathing has-been  
restored to People in this Situation, by opening the Aspera Ar-  
teria, and by that means giving the Air free Access to the Lungs  
**(See** *Dethardinpii Dessert, de Methode Subveniendi Submersis  
per Laryngotomiam).* I am sufficiently apprised, that a great  
many Physicians forbid making an Incision in the Aspera Arte-  
ria, and. consequently condemn this Operation, because they  
think it productive of Death, and are therefore prompted by a  
foolish- Zeal to brand their Fellow-physicians, who attempt an  
Operation so dangerous in their Eyes, with the odious Appel-  
lations of barbarous .and inhuman. \* But the Gentlemen who  
are in this narrow and confin'd Way of Thinking, are highly  
mistaken. For, in this Operation, the small incisions made  
in the Aspera Arteria are so sar from killing the Patient, that  
.they do not eveu produce that Effect, when made considerably  
large ; and *Garengeot gives* Examples of Various Cures per-  
formed by this Operation : For this Reason we think ourselves  
justly authorized with *Cassemus* fin *Tractat, de Vicis Audiius.q,  
Organise* to pronounce those Men unskilful, cowardly, and  
even cruel, who, in the Cases above-mentioned, foolishly neg-  
secting this Operation, which is often safe in itself, and at-  
tended withine most speedy and salutary Effects, suffer the Pa-

tients to die, for want of this proper and seasonable Assistance.  
Instances of this Nature may he **seen in** *Nicolaus Fontanus Ob.,  
servat. Rarior. Analect.* and in *Caesserius. - . - '*

Now when this Operation is to he performed, that Part of  
the Trachea seems most proper for making the Aperture in,  
which is situated betwixt its second and third cartilaginous *An-  
null,* or Ringlets. The Incision may nevertheless he made **a**littie lower, without any Danger. The Method of performing  
the Operation, especially when the Stone os any Emit, a Bean,  
a large Pea, a small Stone, or any other such Substance, felling  
into the Aspera Arteris, and threatening a Suffocation, is to  
he extracted, is in this Manner: The Patient is first of all to he  
placed in a reclining Posture, either in Bed, or .in some conve-  
nient Chain, arid his Head is to he held firm by an Assistant  
standing behind his Back. Then a longitudinal .Incision thro'  
Skin, Fas, and Muscles, is to he made, from about two Fingers  
Breadth helow the *Cartilago Thyroidei, css Scutiformis,* or the  
*Pomum. Adami,* in the Middle of the *Trachea,Sawn,* ns the  
very *Sternum ;* so that the Length of the Incision , may he  
equal to two or three, or even, in tall Patients, to four Fingers  
Breadth (See *Tab.* 42. *Trio.* 14 *A. A.). .*

Then an Assistant is carefully to draw the Lips of this Orifice  
from each other, either with proper Hooks, or his Fingers;  
and having absorb'd and wip’d away the Blood, either by a  
Sponge, or a linen Cloth, so that the *Aspera Artesia* may he  
seen, three or four of the Annuli or Kinglets of this spiral  
Pipe are to he cut in such a manner, that the Incisions made  
in the Whole may form one continued line: And thus, what-  
ever Substance may have Ilipt into it, must he artfully and  
.warily extricated, either by a Prohe, Hook, or Forceps.\* This  
being done, the Wound is to he cleansed with a Sponge, and  
its Lips heing kept in Contact by agglutinating PlaisterS, proper  
Compress and Bandage are to he apply'd. 'Tis afterwards care-  
fully to he agglutinated by means os vulnerary Balsams, as in case  
of Wounds in the Aspera Arteria : And in this Very manner,  
here in *Helmstadt,* I myself happily extracted a Piece of boil'd  
Mushroom from a Patient, who happening to laugh whilst he  
was supping Broth, in which, among other things, there, were  
Mushrooms, had the Misfortune to have a .Piece of one of  
them flip into his Arteria Aspera, by which he was in Danger  
of being suffocated. *Ravius* also informed me, that, in this  
very Meshed, he happily extracted a Bean from, the Throat of  
a Patient; but the modem Surgeons are entirely silent with  
regard to this Methed. Some, in order to induce a more  
speedy and *seemly* Cicatrix on the Wound, recommend the Me-  
shed os Agglutination by Suture, aS in the Cure of Hair-lips, by  
Passing Needles thro' them, whether the Operation he performed  
for a Quinsey, or for some other Disorder. But, in my Opi-  
nion, 'tis highly improper to follow a Practice which is attended  
with immense Pain to the Patient, when, at the same time, a  
Methed that is sar milder, and equally safe and secure, may  
he fallen upon. **ι**

ι' But if in a Quinsey, after the Use of proper Medicines, and  
repeated Evacuations of Blood from different Veins, there is  
still a Necessity for making an incision in the Trachea, in order  
to prevent a Suffocation, the Operation may be performed in  
three different Manners, a Description of each of which , my  
present Design calis for. : ....

First then the Patient must he plac'd in a Bed, or Chain,  
with his Head reclin'd at the Surgeon's Discretion, and held  
firm by an Assistant, as we have already said» Then let the  
Surgeon make an Incision in that, middle Part of the Tbroat,  
and in that Manner we have above directed, till he reaches the  
Trachea itself; or, if ’tis thought proper, the Skin also on  
both Sides may he said held on by the Surgeon, and hisAffistant.  
Then it may he raised and cut longitudinally : After which,  
the Fat and Muscles lying above the Trachea may he cut.  
Some would heve these Muscles first disengaged from the Tra-  
chea, or Very warily separated from each other ; but there is  
no Occasion for all this Labour, fince they may he cut safely,  
and without any .Danger. Then the Surgeon cleanses the  
Wound with a Sponge wrung out of warm’Wine, or warm  
Spirit os Wine, sor the more effectual flopping of the Blood,  
and orders his Assistant to separate and retract its Lips, either  
by Hooks, or his Fingers. Then he passes his Knife hetween  
two of the Annuli of the Trachea, or, in my Opinion, he may  
eVen pass it in such a manner, aS to cut one of them, fince  
by that means any Silver or Leaden Pipe, whether round or  
fiat, such aS we have represented, (Tab. 23. T, U, and X)  
may the more convenientiy he inserted into the Wound. But  
before the Surgeon withdraws his Rinse, some Prohe, fit for the  
Purpose, ought to he inserted into the Wound, by the Side of  
the Knife, that by its Assistance a Pipe may afterwards he more  
commodioufly put into it. This Pipe is fixed in the Wound,  
by means of a Ligature pass'd thro' its Annuli, or small Holes,  
and carry'd round the Neck, and by a perforated\*Plaister. But  
great Care is to he taken, that the end of the Pipe, which is  
inserted into the Wound, he not allow'd to touch the poste-  
rior Part os the Aspera Arteris, lest by that means a trouble-  
some Cough should he created. But that the Lungs may not  
he

he injured by the external Cold, or by any Filth falling upon  
them, Sis highly proper to ley upon the Pipe a Sponge often  
impregnated with warm Wine, and again wrung out; or,as *Ga-  
rengeot* advifes, a thin linen Cloth, and afterwards a perforated  
Plainer. Thefe Directions being duly observed. Blood is to he  
drawn from the Veins in the Arms, or thefe of the Feet, those  
under the Tongue, or thefe situated in the Neck. Then  
Clysters, Gargarisins, Injections into the Fauces, Malagmas  
under the Chin, deep Cuppings on the Sides of the Neck,  
and on the insides of the Thighs a little above the Knees, with  
sucti other Medicines as are effectual against a Quinfey, are  
diligently to he applled and continain, till such time as the  
Rofpiration cither becomes free and easy, or the Patient dies ,  
one or other of which generally happens within four Days after  
**the** Operation is performed. When, after the third or fourth  
Day, rhe Difease is found miider, and Respiration more *easy,*which may be most quickly and expedinoufly judg’d of, by stop-  
ping up the Pipe with one Finger, the Pipe is to be taken out,  
and the Wound to be agglutinated and treated in the manner  
already drrectid. But when the Difficulty of Breathing at the  
Mouth is as yet found considerable, the Pipe ought to he al-  
low’d to remain for some time longer in the Wound, and **the**other Medicines to be continued, either till Respiration becomes  
more spec, or the Patient expires.

. Another and more expeditious Manner of opening the Tra-  
chea is this ; A two-edg’d Knife (represented Tab. 22. I)  
is applied to the above-mentionrd Part of the Throat, and  
qautiousiy pass’d thro’ Skin, Fat, and Muscles, into the Ca-  
vity of the Trachea itself, and a Pipe is forthwith inserted into  
the Wound, and Artfully lin'd and secur’d in the Manner altea-  
dy direAed. This Method of Operation is not only quicker,  
but the Cicatrix is less, than in the former Method.

I The third and het Method of Operation is by an Instru-  
ment which the Surgeons call a *Trocar,* (fee Tab. 42. Fig. I5,  
Ise) and is to'he performed in fuch a Manner, that this instru-:  
ment, apply’d to the very Middle of the Trachea, may, as it  
were, at one Thrust, he pasted thro’ the Skin, Fat, and Muf-  
cles, into its very Cavity, and, having drawn out the perforating  
Part, let the Pipe remain in the Orifice, till the Patient breathes  
freely, or dies. This Method of Cute I learnt from the wor-  
thy *Fredericus Decker,* some time Professor of Physic **at** *Lepe  
den,* and my old Master, who has allo described it in Page 243.  
of his *Exercitat.Tract.* This Method of performing the Ope-  
ration feems. in one refpecti to have the Advantage of all **the**her, which is, that it is foon over, and the Pipe, at the same  
nine, introduc'd into the Wound with far less Pain to **the**patient, than by any other Method. But even in this Cafe,  
the same Caution ought to he ofed, and the fame Directions  
rdllowid, which we have above specified.

Nor ought this material Caution to be forgot, that the Ope-  
Iation is to he performed as soon as possible, and whilst as yet  
the Strength of the Patient iays a Foundation, for the Hopes  
of the Surgeon: For, when the Patientis Strength is too sar  
exhausted, and he already sinking, as it were, under the Ago-  
nies *of* Death, ’tis then too Ute, and, generally speaking, to  
no Purpose, to attempt the Operation *for* his Relief. It alfo  
seems to he a fase and prudent Step, in a Cafe of imminent .  
Danger, to call in the Aid and Advice of the most skilful Phy-  
sicians that can he had, hefore the Operation he attempted :  
For, since this Operation is by most, who are ignorant of its  
real Nature, esteemed fo dangerous, and pronounced fo fatal to  
Life, ’th highly probable, thatif theCuredoes not fucccedso west  
as could he wished, the Surgeon shall he said to have murder’d  
the Patient, who is, in Reality, cut off by the Violence of his  
Own Distemper; and thus the innocent Operator shall he loaded  
wish all the Infamy and Reproach that Ignorance, and popular  
Prejudice, can throw upon him.

Jf Persons drowned in Water are already, the’ but just  
dead, their Afpera Arteria is to he open’d with all Expedition,  
either with an incision-knife, or any other Instrument the Phy-  
sician shall judge fitting. Then ’tis proper strongly to blow  
into the Orifice made, either with the naked Mouth, or by  
means of a Pipe, if any stdin .Thing is at hand, because, in  
**this** Cafe, aheve all others. Delays are dangerous. For  
that justly celebrated Physician *Dethardingius,* some time Pro-  
fessor *of* Physic at *Rastoch,* now at *Copenhagen,* in a Disser-  
tation upon this very Subject, publishil not long ago, insonas  
us, that by this Method, if speedily put in Execution, Life re-  
turns to the suffocated Patient with the injectid Ain, and that  
he is, in a manner, miraculousty raised from the Dead. For  
this Reason I think the Operation is not, in Cases of this Na-  
ture, to he neglecied, but performed, whenever the Oppor-  
tunity offers, with all the Haste and Expedition imaginable.

I must here likewise observe, that this Operation, as it is  
Reimer performed in the *Larynx,* nor in the *Branchia,* but in  
*the Afpera Asteria,* or *Trachea,* ought neither to he called  
*Caryngetamy,* nor *Brenchatsmy, a* it commonly is by most Phy-  
sicians and Surgeons; hut rather, and that too more properly.  
*Tracheotomy.*

*Fredericus Mntanus, and Scacberus,* **Professor at** *Lcipscc,*

have each of them published a Book on BronchotOmy ; and  
*Julius Cajscerius* has treated of Lurvr.gotomy in the Book above  
quoted, where he illustrates this Operation by a Variety, of  
elegant CuE. *Rene Moreau* also, in his *Epistola de La-  
ryngotomia,* and *Th. Focnus,* in his Chirurgica! Books, have  
written very learnedly upon this Operation.

MI. *Sharp* observes, that this Operation is easy to perform,  
and utterly void of any Danger whetfoever, notwithstanding the  
frightful Cautions laid down by Authers.

The Manner of doing it is by making a longitndinal Incision  
theo’ the Skin, three Quarters of an Inch long, between th-  
third and fourth Ring of the Trachea, if you have the Choice  
of the Place; and when you cannot make it *fo* high, the Rule  
will be to wound a little below the Tumor. It is always ad-  
vis’d to pinch up the Skin for this Process, which, however,  
may he left to the Discretion of the Surgeon. When the Skin  
is cut thmi, you must make a smell tranfverse Incision into the  
Wind-pipe, and immediately introduce a crooked Cannula near  
half an Inch long, of Silver or Lead, with a couple of little  
Rings at the Top Of it, thro\* which a Ribband may he pass’d  
round the Neck to keep it fix’d in the Wound.

Some heve prefrrihed making an Incision thro’ the Skin and  
Trachea at once, with a Lancet, or Knife, as the more easy  
and expeditious Method, and I once saw it perform’d in that  
Manner , but it pro vid very inconvenient; for the Wind-pipe  
in Respiration, moving up and down, flipp’d from the Orifice of  
the Skin, and made it very difficult to introduce the Cannula,  
and afterwards to maintain it in its Situation : Wherefore I  
think it absolutely necessary to make the external Incision lond  
gitudinal, and even pretty large, as I have directed above.

The Caution laid down of raising the Sternohyoidei, and  
Sternothyroidei Mufcules, before cutting the Wind-pipe, is  
not to he regarded ; and as to the Division of the recurrent  
Nerves, and great Blood-vessels, fo much apprehended in this  
Operation, ’tis not in the least to he feared, since they are  
quite out of the Reach of the Instrument, as any one skill’d in  
the Anatomy of thofe Parts must very well know.

The Method of Dressing will he easily understood, since after  
the Patient can breathe by the natural Passage, if you withdraw  
the hollow Tent, the Wound will become a simple one ; and,  
notwithstanding its Penetration thro’ a Cartilage into a large  
Cavity, require a superficial Application only. *Sharp’s Surgery.*. The following Case, communicated to the Royal Society by  
Dr. *Martyn,* contains something new and ingeninus, and must  
nor,- for that Reason, he omitted.

A young Lad, being in a good State of Health, was all of  
a sirdden taken ill with a violent Disorder in his Throat; in  
which, however, I could see nothing wrong, the Amygdalae,  
and other Parts in View, being in all Appearance sound enough,  
but only looking a little drier then ordinary, without any ex-  
ternal Tumor appearing about the Larynx, and no considerable  
Frequency orStrengni in his Pulse : But he had great Pain and  
**a** Dyspnoea, with an Impossibility of swallowing either Li-  
quids or Solids ; every thing returning forcibly by the Mouth  
and Nofe, when he made an Effort to get it over. From all  
which I reckon’d it an Angina of one of the worst Rinds,  
without any apparent Tumor, and the Seat of the Disease in  
the Larynx and the Fibres common to it, and the Top of the  
Gullet. '

Notwithstanding repeated Bloodings, Blisterings hetween his  
Shoulders, Cupping,*etc.* the Difease continu’d so obstinate,  
and the Patient so like to suffocate, that next Day in the Af-  
ternoon his Friends, altho’ very averse in the Morning, when  
I first propos’d the piercing the Wind-pipe, at length, earnestly  
desired, that the Operation might he performed; and the poor  
Lad bad us try any Experiment to preserve his Life. He had  
good Reason so to do, for, indeed, in all Probability, in a  
few Hours he would heve been strangled to Death most mise-  
rably. We directiy set about the Operation, which was done  
with filch Success, that in less than sour Days his Breathing  
being perfectiy easy, and his Deglutition bring almost fo, we  
remov’d the Cannula, and left the Glottis to do its own Office.

According to *Ccelius Aurelianus,* and the Author of the *Liber  
Intraductarius,* ofcrihed to *Galen,* Bronchotomy was proposed  
by *Asclepiades,* (however inconsistent with his Delicacy, and the  
**rest of** his Charatiler, **the** seeming Harshness of this Operation  
may appear) and is defcribed and earnestly recommended hy  
almost **all the** Systematical Writers of Surgery, from *Paulus of  
Atgine,* and, as **he** fays, *Antyllus,* and some others of the best  
Surgeons before him, down to the profent Times. But when  
they are at fo much Pains to defend the Reasonableness of it,  
and when they shew so much Fondness of citing and telling  
Examples of healing accidental Wounds of the Trachea, with-  
out ever mentioning their own regular Performance of the Ope-  
ration (which would heve been a shorter, and much more esse-  
ctital Recommendation ofit) ; when, I fay, I consider all this,  
**I** find myfelf obliged to think, that it his very seldom been  
reduced to Practice. So rare had it been, that *Aret ecus,* a Man  
of vast Judgment and Skill in Diseases, thought the Operation  
-had never **been** actirally done with Success. And *Catlitts Acre..*

*lianus* looked on it as an impracticable Whim of *Asclepiades.*Neither *Avenxoar,* nor *Albucasis,* knew any thing os their  
Countrymen who had undertaken it. And the *Arabians* are  
reputed to have been hardy Surgeons enough. The most I  
know of amongst them of this Kind is in *Anenzoar,* who trsid  
the experiment on a Goat, and cured the Wound, which  
shews the Ingenioufness and Industry os the Author: For as  
to whet von will find some Writers telling you, that *Rases* saw  
*Andrusius* the Physician do it (the Copy I looked into, printed  
at *Venice* I505. calis him *Ancilisius*; and, perhaps, it should he  
*Antyllus* for them both) ; I think this flows from a mistaken In-  
terpretation os that Author's Meaning. If you read the whole  
Context, I think you will easily conceive, that all he says of  
the Operation is upon Hearsay ; and consequently, that he had  
only seen in Books, that such an one had done it. That most  
accomplished Anatomist and Surgeon *Fabridus ab Aquapendente*frankly acknowledges, that neither he, nor any of his Contem-  
poraries, had ever ventur'd to perform it: Neither does his Suc-  
cessor in the Profession of Surgery, and his Rival in Anatomy,  
*Julius Case grus* of *Placentia,* pretend to have done it, the'  
he has endeavour'd to Hustrate the Operation by some very neat  
Figures, which you will not readily suspect to he from any  
but dead Bodies. And next to him *M. Aurelius Severinus,*who was a very judicious and learned Man, and the hast and  
boldest Surgeon os his Time, though he recommends it with a  
great deakof Warmth and Keenness, yet it seems, even in his  
latter Days, he never had Occasion to try rt ; so that the first  
undoubted and distinctly recorded History I can find of this  
Operation being actually practised, is in the learned *Anton. Musca  
Brafavolus,* who performed it in a desperate Quinsey, when  
the Surgeon refused to do it; and repeated it again in the like  
Case. Mr. *Arnaud,* the *Frenchman,* did it, but his Patient  
died: However, his Countryman, Mr. *Binard,* had hetter  
Success. Dr. *Freind* cites *Purman* doing it ; and tells us of  
another Case communicated to him by a Surgeon, whom he  
does not name. And besides these, I believe there are but few  
Instances can he produced, of any who really performed the  
Operation on a living Person. I hear now, that Mr. *Baxter,*a Surgeon in *Cotopar,* of *Fife,* not far from us, and Dr. *Oli-  
phant, in Gasic in Perthshire,* did it with very good Success  
within these sew Years.

In the actual Performance of the Operation they certainly  
did, or might have observed some things omitted by Authors,  
and even some not perfectly agreeing with the common Ac-  
counts that are given of it. I think it worth while to observe,  
that in the very Cutting, before we got a free Aperture into  
the Trachea, and the Pipe introduced, the Patient felt some  
Relief; which, I thought, might be ascribed to the Effusion of  
Blood in the Operation; a small Quantity whereof, evacuated  
so near the Part affected, could not, according to the true  
Laws os Hydraulics, and the Observations and Practice of the  
Antients, (however disagreeing with *Bellini's* Theory) but  
make a more considerable Revulsion, than a much greater, taken  
away at a great Distance.. Whence the judicious *Fabricius ab  
Aquapendente,* with Very good Reason, supposed, that by the  
Derivation here, the Patient would be more , apt to feel some  
Relies, than Trouble; of which *Julius Guastavinus* too made no  
Doubt in bis Dispute upon this Subject against *Aretaus.* And  
now their Supposition and Conjecture is confirmed by Experi-  
ence. And since there Continued a greater Flux of Blood, m  
the Wound while it was suppurating, I reckoned the Circula-  
tion in the Muscles of the Larynx to he with less Force than  
ordinary, and so probably to contribute to the diminishing the  
Strength of the Voice, winch, for a good many Days after the  
Operation, was observed to be much weaker than it used to  
he; which I all along thought was rather owing to this, and  
the Lowness of his Body by his flender Diet, than to any Hurt  
of the recurrent Nerves; which, being cut, do indeed destroy  
the Voice; but by their Deepness, are in less Hazard, than  
some in old Times used to think.

In doing the Operation on a living Person, one cannot but  
remark at the Very first, that the Cannula should not he made  
near so short as is ordinarily proposed in Books and chirurgical  
Lectures: For we found, that, upon cutting, the Parts, especially  
the Thyroid Gland, (which is not so much minded in most os  
the common Descriptions of this Operation as should he) soon  
become so minified, that it will require a Pipe above an Inch  
long, to penetrate sussicientiy into the Aspera Arteria, which  
is double *Garengeogis* Allowance of six lines; who is one of the  
recentest Writers, and haS communicated to ns all the Surgery  
the *French* are Masters ofi The leaden Pipe we had prepared  
not answering the Design, that which we made use of was too  
long, and too small, being the common Cannula for tapping in  
the Dropsy, flattened a little at the Pud, and hindered by a  
very thick Compress, perforated in the Middle, from penetrating  
too deep into the Trachea.

The mucous Particles, and Steams arising from the Lungs,  
made a constant Weeptng os a thin slavery J.iqrinr, from the  
Mouth of the Pipe, Part whereof thickening, and stuffing its  
Covlry, sometimes very much incommoded the Patient's Respi-

ration by it, so aS to render it necessary to have it taken out and  
cleaned. And hence, when some Modems very precisely bid  
us put a thin Slice of Sponge, or a Bit of Mullin, *etc.* close  
over the Orifice of the Cannula, to prevent the Ingress os  
Dust, Down, or the like, into the Lungs, it confirms what I  
said before, os the Unusualness of the Operation, and looks as  
if they had only contemplated the Matter in Abstraction, as the  
Metaphysicians say, without considering they’ had not to do  
with a pure thin dry Air, but with a heterogeneous Fluid, that  
is moistened and thickened with Viscid Particles, which are apt-  
to run together in stiff Concretions. And therefore, though it  
must he acknowledged, that there would have been less Hazard1of a Stoppage, if our Cannula had been shorter, and wider, espe-  
cially at the Mouth, I cannot but think it an ingenious Pro-  
posal of one of our Ministers' here, to make the Pipe double,,  
or one within another, that the innermost might safely and  
easily he taken out and cleaned when necessary, without any'  
Molestation to the Patient: For it is no small Trouble to him,:  
to he obliged to have the Bandage frequently removed, and the.  
Pipe fitted anew to the Orifice made in the Trachea.

And indeed we found no Inconvenience in our Patient's  
breathing the Air as it passed through the Pipe, without *any.*cleansing or intercepting Medium, though the House was none-  
of the cleanest, bring an ordinary Tradesman's here. But if  
by a larger, and consequentiy a more patent Tube, one, espe-  
cially of more delicate and ticklish Lungs, should be incom-  
moded that way, I think the Access of Dust, *etc.* might con-  
Venientiy enough he hindered by a Piece of Mullin, or thin  
Hain Crape, tied flaekly about the Neck over the Orifice of the  
Cannula, so however, as not to touch it, or to he wetted by the  
Liquor coming from it.

ThePatientwas soon perfectly recovered: Hebreathes, speaks,  
eats, drinks, and performs all the other Offices of life, and  
goes about his Calling as formerly. And now I cannot but  
take Notice of the needless Pains some Writers are in about  
healing up the Wound by Bandaging, Stitching, *etc.* For we  
found it easily to fill up *os* itself, in a Very few Days, by only  
dressing it every other Day, or so, with a *soft Tens,* made  
less and less every Dressing, and armed in the common way  
with *Linimentum Arcei.* I believe indeed it would have taken-  
a little more Time to heal, if our Patient had been alder.  
*Phil. Trans. Abr. Fol.* 8.

In the preceding Account of a Quinsey, I have purposely  
omitted *Boerhaave* Sentiments concerning this Distemper,-  
which I reserved for this Place, that they may serve as a Reca-  
pitulation of whet has been already specisy'd; and that the  
Reader may have in one View, the Sum of whet has been de-  
livered by a Multitude of Authors; and at the same time the  
Opinion of this Author, an excellent Judge of Medicinal Sub-  
jects.

A very difficult and excessively painful Deglutition, or Respi-  
ration, or both together, which happens from any morbid Cause  
acting upon the Organs subservient to these Functions situated-  
above the Lungs and Stomach, is called a *Eluinsey,* of winch-  
two Species have been observed; one without any manifest Tu-  
mor, either internal, or external; in the other, some sort of  
Tumor is always discovered in sortie of the Organs before-men-  
tioned.

The first Species usually happens at the End os Chronical  
Distampers, principally after great and frequently repeated EVa-  
cuations. .It is attended with a Paleness, Extenuation, and  
Dryness of the Fauces; whence 'tis evident, that the Nerves  
and Muscles of the Parts affected are paralytic. It is almost  
always a Sign of approaching Death, and Very seldom admits of  
any Cure; but, whenever it does, it must he performed by  
Remedies which are warming and corroborating, and which  
fill the empty Vessels with good Vital Juices, such as nourish-  
ing Aliment taken in Quantities proportioned to the digestive  
Powers, and Wine.

This Species also sometimes appears without any manifest  
Signs of a preceding Distemper, and then inggenerally fetal.  
Dissections of Bodies after Death, have discovered that this Case  
is almost always attended with a Suppuration of the Lungs.

That Species which appears with a Tumor, takes different  
Denominations, either from the Nature of the Turnor, or the  
Part which it affects. Hence QuinseyS are distinguished into  
(Edematous, Catarrhous, Inflammatory, Purulent, Scirrhous,  
Cancerous, and Convulsive.

These Tumors affect the Tongue, and its Muscles; the  
Palate, Tonsiis, the Uvula, and its Muscles ; the Cavities of  
the OS Frontis, the Maxilla superior, and Os Sphenoides,  
when a Polypus, arising in any of these, increases to such a.De-  
gree aS to stop up the Nostrils, depress the pendulous Veil of  
the Palate, streighten the Fauces, and obstruct the Passages os  
the Pharynx and Larynx; either some or all the Muschis Of  
the Os Hyoides, the Muscles of the Larynx, whetherinternal,  
external, proper or common; the internal Muscular Membrane  
of the Aspera Arteria; the superior Muscles of the Pharynx,  
and Oesophagus, otherwise called *Sphincter Gula ,* the mus-  
cular Parts of the (Esophagus ; and those Glands which .are

situated so near the Aspera Arteria and CEfophygric, that, by  
their Tumefaction, thesc Conduits may he compressed, amongst  
which are all the Salival Glands, and others dispersed about these  
Parts, and lastly', the ThyIoide Glands.

From this History of the Disease, Reasons may he readilv  
assigned for all those various, unforeseen, and satai Accidents,  
winch sometimes attend a Quinfey. -

... But as this Distemper is attended with a Variety of Circum-  
stances, whi h are productive of Various Events, it will he  
necessary to specify Particulars.. ... ...

*Of An quinfey arising. from a weary, aedernatosc, and catarrhous  
Tumor.- ... -*

' This is a laherious and painfid Exercise of Respiration and  
Deglutition, from a lymphatic or oedematose Tumor os the  
Pattsdestined for these Functions, or those adjacent to them.

- The Seat of fuch a Τumor, like that os every Coacervation  
of Lymph, is in that Part of the Glands, where the Lymph,  
secreted by the Arteries, is separated from the Mass of Blood,  
and deposited. ... ...

) The Cause therefore of such a Tumor is, whatever prevents  
asses Discharge of the Lymph from these Reservoirs ; and the  
Causes of such Obstructions are manifold and various, as,  
: Any Compressure os the Vessels into which the excretory  
Ducts of these Glands naturally discharge the secreted Fluid.

: An Obstruction formed in the Follicule os the Glands, from  
chalky, pituitous, calculous, ' fungous, ‘ or such-like Concre-  
tions.

The same Kind.of Concretions in the Emiflaries, or excre-  
tory Ducts, of these Glands. \* ' ” -

A Compressure os any os the Parts above-mentioned. ‘  
r''Cold apply'd to the Extremities os the Excretory Ducts.  
; A languid Circulation os the Humours. - '

‘"The effects of these Obstructions are a watry, white, cold  
Tumor; a Compression os'the adjacent Parts , and consequent-  
ly an Impediment os thofe Functions, winch depend upon the  
natural State os these Parts.

\* - Hence the Diagnostic Signs will he easily known ; and also'  
the Prognostic, which is, that if the Tumor is suffered to ad-  
Vance much, the Patient will soon be suffocated.

'.The Cure is to be attempted by resolving and removing the  
obstructing Matter, by means os emollient, aperient, and re-  
laxing Remedies, apply'd either in the Form of Fomentations,  
Cataplasms, Gargarisms, Injections, Collusions, or Vapours;’  
or if necessary,, by Frictions apply'd to the Part affected.  
Caustics convey'd through a Cannula to the Part, or by Inci-  
sions, which are preferable to Caustics.'

\* Meari time, such Remedies as diminish the Quantity of  
Lymph, by evacuating a Portion of it either at the Mouth, or  
distant Parts of the Body, are by no means to be neglected.  
.Suchare, ‘ '"si"..' 7’ sc\ . .sc'. EE.

.\* Apophlegrnati sms, which consist of such Ingredients as by stimu-  
luring the Parts affected; or those adjacent to them/ incline them  
to discharge a considerable Quantity of the morbific Matter, or of  
Lymph easily convertible' into it.ῆ Of this Sort are the Roots  
of Pellitory *es Spain,* and Horse-radish,' Mastich, Ginger,  
Pepper, and particularly Nitre. . In . the *Pharmacopoeia Paupe-  
rum,* there is a Powder under the Title of *Puluis Synanchicus,*which is Very well' adapted to these Purposes, and should seem  
of Efficacy in an cedematous Quinsey, tho' for one of the in-  
flammatory Kind, for winch the Author recommends it, much,  
thoacrid. ‘sc'sc.si . ’

Take Salt of Prunella, (or Nitre) an Ounce and an half;  
.' white Pepper,' three Drams; white Sugar, four Ounces ;

make into a Powder for the Patient to held in his Mouth,“  
and swallow gently. Tins causes a .large Evacuation of  
Salivas

As Vesicatories draw off a considerable Quantity of Lymph,  
and direct it from the Fauces to distant Parts, where it is less  
capable of doing Mischief; these are also of singular Use in-a  
Quinfey of this Kind. They are to he apply'd to the .Back,  
under the ears, or to any other Part. i . -

Such gentie Sudorifics also as are not aceompany'd with any  
considerable Degree of Heat, aS they contribute to the Dif- -  
charge of the serous Humours, are os Service, if administered  
internally, or apply'd externally, in a dry Form. AS are, for -  
the like Reasons, Diuretics *os* the same Kind. But those Kinds  
of Cathartics, which are called *Hydragstgues,* from their Efficacy  
in evacuating watry Humours, are, in this Case, of singular  
Use. Of this Sort are Jallop, Scammony, and their Prepara-  
tions. -- — ” \_.

Mean time, the Patient must avoid large Quantities of  
Fluids, and take AhmentS which are warm and drying; for.  
by this means he will he carrying on the End proposed, that of  
diminishing the Quantity of Lymph in the Habit. . i

Lastly, the Circulation of Blood must he considered; and if  
this he sound too languid, it must he accelerated by means adapt-.  
ed to that Purpose; amongst which are Frictions *Of the exter-*

nal Parts; and Volatile oily aromatic Salts administered inter-..  
nally. . ...

*A Scirrhous Quinfey.*

It sometimes happens, that a scirrhous Tumor occupies the  
Tonsiis, or some other of the Glands mentioned above; and \*  
this is said to he frequently caused by expofing these Glands,  
weakened by a preceding Tumor, before they have recovered  
their natural Tone and Strength, to the cold Air, \_or too cold  
Applications.

This Cafe may he distinguished by the ordinary Signs of a  
Scirthus (See ScIRRHUS). And if it he foreseen, that it will  
he, or if it actually is, any Impediment to Deglutition, or Re-\_  
spiration, or both, the safest way is to extirpate the Scirthus by  
Excision, is it can he easily come at. Or it may be wasted by  
Degrees with corroding Applications. For this Purpose, let a  
Pledget of Lint, fitted to the Slupe of a Quill, be impregnated,  
with Oil of Tartar *per Deliquium,* and apply'd immediately to  
the Part affected, by means os a Cannula.

A stronger Cathaeretic may be prepared of Quick-lime ; but '  
there is more Danger in the Application.

*An inflammatory ssspinscp.*

When the Muscles and Glands employed in Respiration  
and Deglutition, or those adjacent to them, are by any means .  
inflamed, an inflammatory Quinsey is formed, which is particu- -  
larly to he regarded, because of its excessive Acuteness, and  
often insuperable Violence.

The Causes os this, in general, are the same as those  
which are productive os Inflammations in other Parts (See IN-  
**FLAMMATIO).** But a great many Causes may contribute to  
determine the Inflammation to the Parts above specify M, par-  
ticularly to the Larynx, Pharynx, Os Hyoides, and their Mus-  
cles, and to the superior Part os the Aspera Arteris, which, just  
under the Glottis, is furnished\*with a prodigious Number os ‘  
Blood-Veffeis, running in Directions somewhat peculiar.

Among these Causes may he numbered, a natural Disposition,  
which principally prevails in young Constitutions, abounding  
with Blood, and particularly in those who have red Hair.

. Frequent and Violent Exercise of the Parts above-mentioned,  
either in Declaiming, Singing, or Vociferation; riding bristly '  
against a cold Wind ; blowing into musical Instruments; great  
Heat succeeding intense Cold, in the Spring ; Dryness os the  
Fauces, occasioned by respiring het Air, in the Summer ; or'  
in an inflammatory Fever.'

When an Inflammation is produced by the Causes above-  
mentioned, Very terrible Symptoms are excited, ’ which are va-  
rious, aS the Disorder happens principally to affect different '  
Parts. ' ' .’ ;. τ

Thus, if the internal Muscular Membrane of the Aspera Ar-  
teris is only affected, a Tumor, Heat, Pain, and burning  
acute Fever are excited, without any external- Signs os the '  
Distemper. In this Case the Voice is small, shrill, and uttered  
with a hissing Noise. Inspiration is excessively painful ; Respi-  
ration is small and frequent, and scarcely performed but in an  
erect Posture, and then not without much Difficulty; hence  
the Circulation os the Blood through the Lungs is much ob-  
structed, the Pulse begins to fink surprifingly soon, great Anxi-  
eties come on, and the Patient quickly expires. This in one .  
of those fatal Cases, which destroy without anv external Ap- '  
pearance; and the nearer the Seat is to the Glottis and Epi-  
glottis, the more fatal it is.

Is the Larynx is affected with an acute Inflammation, which  
principally seizes the Musculus Albus of the Glottis, together .  
with the fleshy Muscles, which, when they act, close lra-a "  
most terrible and strangulating Quinfey arises, because, upon this  
Occasion, the Passage os the Air from and to the Lungs is  
utterly obstructed by the closing os the Glottis.

The Signs os this Species os Quinsey are much the same aS  
those os the preceding, accept that the Pain is intolerable during  
the elevation os the Larynx, in order to swallow; and is re-  
markably increased by Speaking, or Vociferation; the Voice is  
extremely acute and shrill; excessive Anxieties come on, and  
Death quickly ensues. This is,. os all those Qpinseys, without  
any external Signs, the most dangerous. -/

Is the Muscles only, which are employ'd in elevating the Os  
Hyoides and Larynx, suffer an acute inflammation. It may he  
distinguished by these .evident Signs: Respiration is tolerably  
free and easy; but the first Part of the Action os Deglutition is  
attended with excessive Pain, because on this Occasion the. Mus-  
cles above-mentioned act. Add to these the general Signs os -  
an Inflammation, which'will appear evidently in these Muscles  
upon examination. S .

When the Pharynx alone is affected,- the specific Sons os it-  
will appear upon inspecting the Fauces. In this Case, Respira- ‘  
tinn is tolerably easy; but Deglutition extremely painful, .or \*  
utterly impossible; for upon any Attempt to swallow, the Sub-  
stance intended to he convey'd tn the Stomach, is return’d by  
the Nofis, or sometimes forced inter the Aspera Arteria, there'  
exciting a Violent Cough, Hence arises an Impossibility of

raking anv Aliment, either solid or fluid, the Consequence Of  
which is, that the Body must become extenuated and dry, and  
that the Fluids must contracti an Acrimony, for want of a fresh  
Supply of balsamic Chyle. The Fever, however, in this Cafe,  
is not fo intenfe, as in those preceding, nor does it so sudden-  
ly terminate in Death.

If the Tonsils, Uvula, and pendulous Veil of the Palato,  
together with the Mufcles called *Pterygestaplrstini,* are much in-  
flam’d, nearly the fame Symptoms will arise as in the preceding  
Cafe. Respiration is, however, somewhat laborious, and is  
-little, or not at all perform’d then’ the Nofe, and by the Fauces  
not without forne Difficulty; whatever is attempted to he  
swallowed, is forced back again thio’ the Mouth, by reason of  
the Obstruction it meets with, and the excessive Pain it excites;  
there is a perpetual Discharge of Saliva by hawking, and a con-  
tinual and copious Distillation of Phlegm into the Cavities of  
the Tonsiis; an acute Pain is perceiv’d in the internal Ear, and  
the *Tuba Eastachiana,* which passes from the Fauces to the Ear,  
**a** crackling Noife is perceived in the Ear, during Degiutition,  
and sometimes utter Deashefs emines. This Cafe is in out Days  
frequent from the Venereal Difeafe, and is attended with much  
Danger.

If all or most of thefe Parts are inflam’di the Disease is in  
Proportion more severe, as the Inflammation affects the greater  
Number of the Parts, above fpecify’d ; and hence more Sym-  
ptoms may be expected to arife, and those of a worse Kind.

For the Return of the Blood into or thro’ the external Ju-  
gulars now compress’d, being intercepted, the Fauces, Lips,  
Tongue, and Face, swell; the Tongue hangs out of the  
Mouth, is intoned and inflamed; the Eyes are red, promi-  
nent, and ghastly; the Brain is, as it were, suffocated by an  
Abundance of Blond retained in it; hence the Sight, Hearing  
and Feeling, are rendered dull; hence alfo a Delirium, a per-  
petual Gaping of the Mouth, a Stertor, an Impossibility of ly-  
ing down, because of the Strangulation attending that Posture;  
and a manifest Redness, Tumor, Pain, and Pulsation, in the  
Breast and Neckwhence the Jugular, and Frontal Veins, and  
thefe under the Tongue, called *Ranina,* becoming varicose,  
are distended.

These inflammatory Quiofeys run thro’ the fame Stages as  
other Inflammations, are susceptible of the same Alterations,  
and, like them, terminate in Resolution, Suppuration, a Gan-  
grene, or Scirthus, unless they strangle the Patient before any  
Of thefe can happen. See INFLAMMATIO.

Therefore as soon as we are satisfied by the Signs above spe-  
cifyin, that the internal Mufcular Membrane of the Aspera Ar-  
teria, or the Mulcles about the Glottis and Larynx, are affects  
ed, we must immediately inquire, whether the Distemper is  
still in Ἀ State of Inflammation, which may he discovered by  
the Signs mentioned under theArticle INFLAMMATIO; and, if  
we find it is. Resolution must by ail possible means be instantly  
attempted. See INFLAMMATIO.

Therefore let Blood be immediately taken away by a large  
Orifice, and in great Quantities, and let this he repeated, till  
such tube as a general Weakness, Paleness, Refrigeration, and  
Subsiding of the Vessels, shew that the Force of whet remaim  
is not capable of augmenting the Tumor and Rigidity Of the  
sinall Vessels about the Parts affected.

This is nearly the Direction of *Hippocrates,* who, in his  
third Book of Diseases, advifes, as the first Step in the Cure  
of a Quinfey, *to take away Bleed,* which, he fays, is of most  
Service, *of drawn from under the Breast.* Ise also orders *Bleed  
to be taken si cm the Cubit.*

Next, strong Purges must he administered, either by the  
Mouth, .of by Clysters, and these must be repeated.

The following Purge is adapted to this intention :

Take of Diagrydium, eight Grains; make an Emussion with  
half an Ounce of Water; to which add an Ounce and an  
half of Syrup of Sena, for a Draught.

A proper Clyster may he thus prepared

Take Sena.leaves, an Ounce; boil these in a sufficient  
Quantity of Water to eight Ounces, and to the strained  
Liquor, add of Njtre and Syrup of Sena, each an Ounce.  
*Bcerh. de Most. Medic.*

This is exactiy conformable to the Advice of *Hippocrates, .*who, in the Piace above quoted, says, that *the Belly mast ar  
purged dnttjnsaurde with a purging Medicine, nr a Clyster.*

The Regimen must be extremely slander, both with refpedl  
to solid and fluid Aliment...

*. Hippocrates* also orders **the** Patient to *abstain entirely foam  
IVine, and to sap thestrained Juice of Ptisan, in* the Treatise  
above-mentioned.

'The other Medrdnes should he principally nitrous and sub-  
acid ; for Nitre is ofall Remedi**es**, perhaps, the most powerful  
for resolving Inflammations.

Mean time, let the Patient receive some tepid, moist, re-  
solving Vapour at his Mouth ; let Fomentations he used exter-  
nally ; and let Vesicatories he apply’d, in order to derive a Por-  
tion of the offending Humours from the Parts assecied.

The following form may serve for an Example of a Va-'  
pour: ...

Take Elder, Rofe, and Marigold Vinegar, each an Ounce ;.‘  
Elder-flower Water, fix Ounces: Mix together; let the  
Vapour of this he conveyed to the Fauces by means of a-  
Funnel. *De Mat. Medic.*

*Hippocrates* also advifes Fumigations of the Fauces, wist;  
*Cilician* Hysiop, Sulphur, and Asphaltus.

When the Muscles which are employ’d, in elevating the 0s  
Hyoides and Larynx, are only affectsd, the Case is not fo dan..-  
gerous; the fame Sort of Remedies, however, are required,  
the\* not so powerful. In this Cafe, anodyne, relaxing, and  
emollient Cataplasins, apply’d externally, are Particularly useful.  
For this Purpose,

Take of the Lens Palustris, (Ducks Meat) sin Ounces;. of  
the Flowers of Water-lillies, five Ounces; Flowers of  
Poppies, eight Ounces ; of Marsh-mallows, six Ounces ἀ  
*of* Elder and Melilot, each four Ounces. Boil these in  
Water, adding at the End of the Decociion, two Swal-v  
lows Nests, and a sufficient Quantity of Meal of Lin-feed j  
make a Cataplofm with three Ounces of Oil of White '  
Lillies. . -

The strained Liquor may he used for a Fomentation, *De  
Mater. Malice. - . -* τ ψ

If the Disorder affects the Pharynx only, or the Tonsils,  
Uvula, and pendulous Veil of the Palate, with the *Maseuli  
Pterygullaphylini,* or many of these Parts together, and the  
State of Inflammation still subsists, all the Remedies above fpe- -  
cify’d are to he called in to our Assistance, that by their united  
Force they may relleve the Patient. But besides thefe, the  
Mouth and Fauces must he kept continually moist, by mild  
attenuating nitrous Liquids, diluting aqueous Fluids, or relax-  
ring Decoctions of pinguious Ingredients; thefe must be kept  
perpetually in the Mouth, without Motion, or they may be  
gargled gently, or injecied with a Syringe. But the Benefit,  
arising from these depends upon their continual Use, for other-  
wise the Parts grow immediately dry. ‘

Take of the Decoction of the Ingredients, specisy’d in the  
preceding Prescription, twelve Ounces; Elder Vinegar,  
Syrup of Marsh-mallows, each two Ounces, purjfyd  
Nitre, two Ounces; mix fora Gargarisin: Qr, *y*

' Take of sat Figs, twenty-twpf Leaves of Mbrsh-rnallows,  
two Ounces. Boll for a considerable rime, and use the  
strained Liquor in the Manner above directed. ‘

But if the Remedies above-mentioned are not at all made use  
of, or are applied, too late. Or without Effeci, provided the.  
Distemper is recent, threatens Strangulation, and resides in any  
Part above the Place where the Incisiori is to he tnade, the 0pe-  
radon Of Bronchotomy must he performed, after prognosti -  
cating the Danger of the Distemper.

After this Operation, the Causes os the Difficulty in Respi-  
ration, which rendered it necessary, must he removed by the  
Methods above specisy’d; and if, during the Cure, the Pa-  
tient is not able to swallow sufficiently for his Nourishment,  
nutritive Clysters must he frequently administered, after ernpry-  
ing the Intestines by one which is cathartic./ ...

Take of good Broth of Flesh-meat, ten Ounces; Nitre,- ten  
Grains; Spirit of Salt, six Drops; make a Clyster to he  
injecled every eight Houts, and retain’d aS long as .is  
possible. , -- ,

If the Inflammation has proceeded so far, that the Part?  
affeoled begins to suppurate, which may he known by the.  
Signs of an Abfcess, JSeeABscEssus, and INFLAMMATro)  
Resolution being no longer possible, we must endeavour to free;the Patient from the offending Matter, by promoting an Abst.,  
cels. See ABSCEsstis. . d

Use therefore emollient Gargarisins perpetually ; apply large,  
relaxing Cataplasins; and, when the Matter of the Ahseesp is:perfectiy formed, and the exafi Situation of it is discovered,  
let it he opened. Mean time, if it should he absolutely pieces-  
sary for the sake of Respiration, the Operation of Bronchotomy .  
may he performed.

It must he remark’d, that the Species of Quinsey which af-  
fects the internal Membrane of the Aspera Arteria, and the  
Larynx with its Musdes, can very seldom arrive at Suppura-,  
tion,. because, if not resolv’d, it must he semi before this can  
happen.

As all Inflammations may terminate in a Gangrene, that  
which causes any Species of inflammatory Quinscy may do so  
likewise. This Cose may he distinguish'd by the general Signs  
- ofa Gangrene (see GANGRENE) apply'd to the Parts affected,  
and whose Functions are impair'd ; and also by Signs which are  
peculiar to this Disease.

Thus if a Tumor, and Redness, which were before conspicu-  
ous, suddenly disappear without evident Cause; is the Pain  
vanishes in like manner; if the Fauces on a sudden become  
equal, smooth, thy, and livid; we may he certain, that a Gan-  
grene is begun; .and if so, it admits of no Remedy.

An inflammation of the Tonsiis, Uvula, and Palate, may  
terminate in aScirrhus, which may he readily discover'd by the  
general Signs ofaScirrhus, (see SCIRRHUS) but is not so easily  
cur'd, especially when it degenerates inm a Cancer. .

If the Nerves which convey Sensation and Motion to the  
Organs of Deglutition and Respiration, are by any means pre-  
vented from exercising their Functions upon those Parts, a ner-  
vous or paralytic Qttinsey is form'd: This is said sometimes to  
happen from a Luxation of the Tooth-like Process of the second .  
Vertebra of.the Neck inwards.. .

If the Muscles of the Larynx or Pharynx are convulsed by  
any Cause whatever, a sudden and suffocating Qtjinsey may  
arise. . This frequently happens in Epileptic, Spasmodic, Hy-  
pochondriac, and Hysteric Cases, where it frequently goes off,  
and returns, without any great Danger. AS it is only a Sym-  
ptom of the original Disorder, and depends upon that, it is to  
' he cur'd by Remedies adapted to remove its Cause.

The Musculus Oesophagaeus, or Sphincter Gulae, when it  
acts, presses the Pharynx to the. hack Part of the Larynx, and  
stops the Orifice of the Pharynxnow this also happens in in-  
voluntary Contractions of this Muscle, so that Wind coming  
from the Stomach, and not being able to pass the Orifice os  
the Pharynx, swells the Oesophagus, and causes a Sensation of  
a Swelling in the Throat.

From the preceding History of QuinseyS, ail the Prognostics  
related above are readily accounted tor, and confirm'd. I shall  
Only remark farther in this Place, that any artificial Compres-  
sure of the.Jugular Veins: will cause a Discharge of frothy  
Saliva from the. Mouth, as well aS that Compressare of these  
Veins, winch happens from a Qu insey.

. ANGIOSPERMOS, Ἀγγεόσπερμος, from άγγεῖβν, a Ves-  
sel, and σπέρμα, a Seed, an Epithet for such Plants as have  
-their Seed or Fruit inclosed in two Membranes, not easily sepa-  
rable from the Nucleus, by way os Distinction from the *Gymno-  
fporrnoi,* γυμνοσπερμοις.^βπνριί from γυμνὸν, naked, *etc.* which  
have their Seed for the most part surrounded with three Integu-  
ments. *Castellus* from *FolcarnePs Flor. Norembescg,* and the  
*Acta Erudici Lips.: .*

- : ANGLICUS SUDOR. See SUDOR **ANGLICUS.**

..- ANGOLAM,: Η. M. Pi *Ai* T. I7. p. 39. *Arbor Indica  
baccifera. Fructu umbilicato rotunde, \* Cerasi Magnitudine,  
dicocco. . . ' '*

. It is a Very tall -and beautiful Tree, running up to an hun-  
dred Feet in Height; and about twelve Feet in Thickness, and  
grows in the rocky, sandy, and mountainous Parts of *Man-.  
gatti,* and other. Provinces of *Malabar;* it is an Evergreen,  
bears a Fruit like a Cherry, and lives a long time.

This Tree is .accounted by . the *Molabarians* an Emblem of  
Royal Majesty,:because its Flowers stick along upon its stiff  
Thorns in the Form of an imperial Diadem. - - -

The expressed Juice of the Root kills Worms, and purges  
bilious and phlegmatic Humours, and evacuates the Water os  
hydropical Persons. The Root.pulverized is accounted good  
against the Bites of. Serpents, and other venomous Creatures.  
*Rail Hist. Plant. - :. . sc .*

... ANGOR, Ἀγωνία, ἀδημονῥα, is a Contraction and Con-  
centration of the natural Heat, the Consequence of which is a’  
Pain of the Heart, Palpitation, and Sadness; and if it happens  
in the Beginning of acute Fevers, it is a Very bad Prognostic.  
*Galen, in Hippocr.. .Epid. L. i.* \*. See AGONIA. - - ..

-- ANGOS, Ἄγγος; the same as ἀγγεῖβν, signifying a Vestel  
in general, and a Receptacle of Humours. Used once by *Hip-  
pocrates,. Lib. 6. Epid,* as *Galen,* expounds him, in a special  
Sense for the *Uterus. ,*

ANGSANA, Ossie. *Angs.aua,* Ephena. Germ. *Anne* I3.  
seueDecur. IL *Anno* Ἕ3. *p..* IO7. *Draco arbor Indica sili.,  
quos.a. Pepuli solis, Axgsuna vel Angsoua favanica,* CommeL  
Hott. Amst. I. 214. Tab. I09. Raii Dendr. II3.

- . It grows in the *East-Indies*; the Part used in Medicine is the  
‘Liquor which.distils from the wounded Tree, and condenses into  
a red Tear, wrapt in thin, reedy Coverings, as sold in the Shops,

The Gum os this Tree,. as. the very learned and ingenious  
*Commelin* says, is sold in .the.Sheps for Sanguis Draconis.  
Hence I cannot but observe, that either our Botanical Authors  
are at a great Loss, and in much Confusion and Perplexity,  
about what Kind of Tree this should be, or else there are seve-  
ral Sorts of Trees winch produce this Gum. . gi-

*lt* is esteem’th an Astringent, and an excellent Remedy in  
Aphthae. *Dale. Raii Hist. Plant.*

ANGUILLA, the Eel, thus distinguish'd :

*Anguilla,* Offic. Schrod. 325. Met. Pin. I88. Aldmv. de  
Pise. 544. Gesa. de Aquat. 4o. Charlt. do Pista 34. Salv. de  
Aquat. 75; Rondel, de Pifc. 2. 198. Schones. Ichth. I4.  
Bellon, de Aquat. 295. Raii Ichth. I09. Ejusch Synop. Pifc.  
37. Jons, de Ksc. 8I. THE EEL. J .

There are two Sorts of them, the large and the small, of  
both which yon are to chuse those that are tender, sat, well  
fed, and that have been taken in a fine clear River.

They are Very nourishing, and well tasted; they are some-  
times salted for the better keeping of them, and then they are  
more wholsome, than at any other time.

\* They produce a viscous and thick Juice, are hard of Dige-  
stion, cause Wind, are injurious to those who are afflicted with  
the Gout, or Stone, and have a bad Stomach: It is also pre-  
tended, that they hinder the Catamenia. *Hippocrates, L. de  
intern. Asse.* would have them used by those that .are lean and  
wasted, and subject to the Spleen. Lastly, there are some who  
will not eat the Head of an Eel, because they fancy it is preju-  
dicial to their Health.

The Eel contains much Oil, Volatile Salt, and Viscous and  
gross Phlegm.

It agrees at all times with young People of a bilious and hot  
Constitution, who abound with thin and sharp Humours, pro-  
Vided they have a good Stomach, and that they use it mode-  
lately.

REMARKS.

The Eel is a fresh-water Fish well known ; sometimes it is found  
in the Sea, not that 'tis produced there, but because it goes  
often out of Rivers into the Sea, and so back again into Ri-  
vers ; it delights in pure and running Waters; and they  
assure us she grows lean, poor, and dies at last, when con-  
fined to muddy Water. She requires also a great deal of  
Water, for otherwise she dies; as also it happens to many  
other Fishes. It is said she cannot bear any considerable Dif-  
ference of living; for in Case she should in Summer-time be  
conveyed into a much colder Water than that wherein she  
was before, she is soon destroyed, in the mean time, they  
say, she can live out of the Water five or six Days, provided  
the North Wind blows at that time; she feeds upon Roots,  
Herbs, Fish, Insects, and any thing she can find in the Bot-  
tom of Rivers. *Atheneus* says, he had seen eels in a certain  
Country, which were so for tamed, that if they offered -  
them any thing to eat, they would come and take it out of  
the Persons Hands.: This Fish lives commonly seven or eight  
Years. *Aristotle* assures us, that in dissecting Eels, he found  
no Difference of Sex in them ; that they had neither Seed,  
Eggs, Matrix, nor Seminal Pipes; and that they did not in-  
gender, insomuch that 'tis pretended, they were gene-  
rated out of the Corruption that is in Mud. *Pliny* frames  
another Symptom for the Explication of it: He says, that  
when the Eels rub themselves against Rocks, the Off-scour- ,  
ing os their Bodies comes afterwards to take Life, and so  
gives Being to an Infinity of small Eels; but neither of the

. Explications seem to be easily apprehended. I am confident,  
if those two famous Authors were now alive, and acquainted  
with the new Anatomy, they would he more cautious of  
advancing Notions, that have so little Resemblance of Truth  
in them. It is now discover'd, that they are Viviparous.

The Eel is good Aliment, and much used; she is tender, soft,  
- and nourishing, .because she contains many oily and balsamic  
. Parts: She has also a great many that are dull. Viscous, and  
gross, which makes the Eel hard of Digestion, and apt to  
produce the many ill effects we have before-mentioned. In  
the mean time the Eel that has been salted to keep, doth  
not produce so many bad Effects; because one Part of its  
viscond and gross Phlegm is spent, and the other attenuated

- and scattered by the Salt.

They eat Eels either roasted or boiled: These that are roasted,  
seem to me to he more wholsome than the other; and the -  
. Reason is, because they are thereby the more divested of their  
viscous Phlegm, than by the other way. They should also he  
well season'd, and you should drink good Wine upon them,  
in order to help the digesting of their Phlegm in the Stomach.

The Fat os an Eel is looked upon to he good to take away the  
Signs of the Small-pox in the Face, to cure the Piles, and to  
make the Hain grow: It is also put into the Ears to help  
Hearing. . - ... .

They make a kind of Mucilage of Eel’S Skin, by steeping and  
helling it in Water, which is applied to Swellings, in order  
to the softening and dissolving of them: It is good for Her-  
nia'S. *Lemery on Foods. - -*

The Oil of the Eel is so offensive to some Stomachs, - that they  
cannot bear it without heing sick.

AS the Eel is a Fish of Prey, the Salts for that Reason must he  
z more plentiful and exalted, i

- ANGUIS.

*.. Serpent,* Offic. Schrnd. 5. 305. *Serpens Anguis,* Schw.

Kept. I37. *Anguss,* Gesn. de Serp. 43. *Anguis Coluber,*

Mer. Pin. 2C-4. *Natrix tarouata,* Aldrov. Hist. Sep. 287.  
Jons, de Semi 89. Rail Syriop. A. 334. Chadt. Excr. 35.  
THE SNAKE.

The Fat and Slough, or last Skin, arc ofed in Medicine.  
The.Fat mollifies strumous Swellings, cures Redness of **the**Eyes, dears them of Specks, and sharpens the Sight, it mid-  
gates the Pain of the Gout. *sole,* ike ANGUIUM **SENECTA.**

Snakes are not so venomous or terrible in *Italy,* and **the**colder Countries, as in warmer Climates. For a Remedy  
against- their Bites, it will he sufficient to make use of Be-  
tony, Cantabrica, [Lavenderileav’d Bindweed, according to  
*Dale]* or Centaury, or Agrimony, or Germander, or Bur-  
dock, or Water-parsnips. One or two of thesis Smioles bruised,  
the Juice drank in Wine, and the Herb apply’d to the Place,  
are enough to work a Cure.

We ought to know, that the Bites of all Serpents are most  
venomous, when they are hungry, and do most Harm when  
**the** Patient is fasting. Therefore these Creatures are most per-  
nicious in the Time of their Incubation; and the best way,  
when you are under any Apprehensions of Danger from them,  
is not to stir out of your Houfe upon an empty Stomach.  
*Celsus, Lib.* 5. *Cap.* 27.

Our Snakes are perfectiy innocent, as is generally believ’d,  
and their Bite is not attended with any Danger ; the’ they' have  
sometimes heen blam’d for the Mischief which Vipers have done,  
by Mistake.

ANGUIS AEscuLAPii, *Johnston,*

Is the only Species of Serpent now known, which can he  
made so tame, as to do no Harm. It is found in many Parts  
of *Italy, Germany, Poland, Spain, Asta, Africa,* and *America ,*it is of a gentle Nature, and People confide fo much in its Gen-  
tleness, that they sometimes leave it in their Beds, where it is  
found, without Fear of bring bit, it is full of volatile Salt and  
**Oil;** they prepare it in the fame manner as the Vipers.

It is good against the Plague, resists Potion, and carries off  
Humours by Transpiration. *Limery de Drogues.*

ANGUIUM SENECTA. - The cast Skin, or Slough, of  
a Serpent, boiled inWine, and the Decoction instilled into the  
Ears, eases their Pains; and, ofed as a Collusion, helps the  
Tooth-ach. It is also an Ingredient in Medicines for the Eyes,  
especially the Slough Of the Viper. *Diaseorides, Lib.* 2.  
*Cap. in.*

Thy Slough of a Snake, burnt and pulverized, then mixed  
with Oil, and reduced to the Consistence of Honey, is an ad-  
mirable Remedy for the greatest Pain of the Teeth, if apply’d  
rd them,'and thrust into their Cavities -, or rub the unsound  
and aching Teeth with the Slough itself not burnt, and they  
will fast out. *Aecius, Tetr.* 2. *Serm. 4. Cap.* 3 3.

ANGULI OCULI, Κανδοι, the Corners Of the Eyes. See  
CANTuus.

... ANGURIA, a Plant of **the** cucarbitaceous Kind. **See**CITRuLLvs and CucUMIS.

. ANGUSTIA, in the common Sense, imports an Anxiety  
Or Restlessness in Distempers; het ANGUsTIA, or ANGU-  
FTATIo, alfo signifies a Narrowness of the Vefleis,. or Pas-  
sages. .. . .

. ANHALDINUM, an Epithet of a Corrosive described by  
*'Hartman, Praxis Chym. Torn. s. Castellus.*

. AN H ALTIN Α RE MEDIA, Medicines which facilitate  
Respiration, Inch aS vulnerary Plants, forne Preparations of  
Sulphur, *etc. . :*

ANHALTINUS,\* an Epithet of a very rich and comforting  
medicinal Water and Spirit, describ’d in some old foreign Dis-  
pensatories. .

. ANHELATIO, ANHELITUS, Άσὐμα. a Shortness of  
Breath, or a difficult, and small, but quick Respiration, which  
happens to found Persons, but especially to Valetudinarians,  
after vehement. Exercise, getting up an Afcent, running or  
dancing. Fat Persons, with prominent Bellies, are much sub-  
jecti to this Disorder, which alfo happens after Repletions, espe-  
cially with the cruder or flatulent Sorts of Aliment, whether the  
Patient he sitting Ur lying ; and worse, if he he running, or get-  
ting up an Aseent and word of all, is it he in the Summer  
Season. In Fevers, Dropsy, Tumors of the Viscera, Pleurisy,  
Cardialgy [Hearthum], and Asthma, these is always an An-  
helatio or Shortness of Breath. See Asthma **and OR-  
THORNOEA. χ**

c ANHELrTus, with the Cbyinists, signifies Smoke, and  
sometimes Horse-dung. ' *Rulandus.*

i ANHIMA; ,

*Anhima, Jedaestest,* is an *Aquatic* Bird of Prey, of *Brastl,*bigger than .a Swan;. its Head is no larger than a Cock’s, and  
its Beak is black, and crooked near the Point; it has **sine** Eyes  
of the Colour of Gold, surrounded with a black Circle; the  
Ball of the Eye is H**ack**, on the Top of its Head, near the Root  
**of the** Beak, arises a Horn, as thick as one of the largest  
Strings of a Fiddle, and about the Length of two Inches,  
crooked at its Extremity, round, as' white as a Bone, sur-  
**rounded with shall and very than Feathers, black and white;**

its Neck is above seven Inches in Length, and its Body near a  
Foot and an half; the Wings are large, and of different Co-  
lours ; its Tail is ten Inches long, and as large as that of a  
Goofe; each Foot hath sour Toes, armed with Claws; it has  
a strong Voice, crying *vihu, vihu*; they never find it *alone* j  
the Female is always accompanied with the Male ; and when  
one of the two dies, the other presently follows. It is the Fe-  
male that I am here describing, the Male is as big again She  
makes her Nest with Dirt, in Form of an Oven, in the Trunks  
Of Trees, upon the Ground.

The Horn of this Bird is esteemed a *good* Remedy to resist  
Polson, for Suffocation of the Matrix, and to provoke Labour ;  
they infufe it for a Night, and next Day Order the Infusion to  
he taken. *Lemery de Drogues.*

ANHUIBA. See SAssAFRAs.

ANIADA, the Term by which the Alohymists express what  
they call the Fruits and Powers of Paradise and Heaven; also  
the Christian Sacraments. In Physics it means the astral and  
celestial Powers; which, by Influence, Imagination, Estima-  
tion, and Phantafy, promote in us long Life. *Rulandus.*

ANIADAY, in the Jargon of the Alohymists,. the eternal  
Spring, and the new World and Paradsse to come. *Johnsen.*

ANIADON, ANIADUM, ANIADUS, Terms in *Parco-  
celsus,* signifying either the Efficacy and essential Forces of  
things, or the celestial Body planted in Christians by the Holy  
Spirit by means of the Sacraments, or the spiritual Man rego-  
Derated. *Castellus. . \**

**These seem the same aS Aniada and Aniaday. . ..**

ANICETON, Ἀιίκιίτβν, Invincible, an Epithet ofa Plaister  
afcribed to *Crito,* and so called, because it was an infallible Re-  
medy for the Achores. It is thus described by *Galen, de Camp.  
Pharm. Sec. Lac. L.* r. *C.* 8. . ... - - ’ ’

Take of Litharge, three hundred .and twelve Drams, Rha,  
[a sort of Rhubarb] an hundred and sour Drams (fome  
put but sifry-two) , of Centss, **an** hundred and. four.  
Drams ; Frankincense, twenty-six Drams ; pinmous  
Alum, sixteen Drams forty Grains j Turpentine, twenty-  
six Drams ; white Pepper, three Drams seven. Grains ;  
Oil, one Pint: Pound **the** dry Ingredients, but boll the  
Oil, Litharge, and Ceruss, in **a new earthen Pot; and**when they have received an Alteration, put in Wax and  
Rosin, and stir them about till it will no longer foul the  
Hands; then take it off **the** Frre, and, when it is some-  
what cooled, add the dry Ingredients, and beat **them well**together in a Mortar. Spread is on Linen, and shift the  
Plainer every third Day. .....

Another *Emplastrum Arstcetum* describ'd by *Aetius.*

*It* is very much in Ufe; for it draws, breaks, **cleanses**. Con-  
gintinates, extracts Pus thro’ **the** Bolster, and is used as a Colly-  
rium. It difcusses Hardnesses, and helps contractied Nerves, if  
applied without Embrocation, that they might not he rofrigo-  
rated. Being dissolved, it ferves instead of an Ointment for Las-  
situdes, removing such as arife in the Beginning of a Disease, *or*from an obseure Cause. Apply’d on large Bolsters, it mollifies  
the extreme Parts. It is an Agglutinant of bleeding Wounds,  
after a Suture, or Imposition of Hooks.; **a** folded Piece'of  
Linen, moisten’d only with Vinegar, bring laid upon the.Com-  
press, which must he cold in the Summer, and warm in the  
Winter. It is good for Soreness or Putridness Of the Soles of  
the Feet,; or Maladies of the Fingers, and *for* Wounds land  
Fractijres; and you may safely rely on it for an Incarnative and  
Cicatrizer, without any other Medicine. It cures the Bites of  
Men, Dogs, and wild Beasts: But one extraordinary Effeel it has,  
which is, to prevent any secret Ahfcess from forming in theCO-  
inn orPeritonaeum, if thereheyet no Suppuration; Ocifthere  
he one to attenuate it, and diverc its Rupture upon the Intestines,  
but a Bolster must he laid upon the Place, and upon thata Locked  
Wool, moisten’d with Vinegar or warm Oil;. which Moisten-  
ing must he renew’d twice in a Day, but the Plainer must tint  
he removed till after three Or four Days. and then, after .fo-  
menting the Place, laid on again. It takes its Name from im  
manifold and wonderful,Effects, **and is** thusprepared:

Take of Squama AEredsifty-eightDrams; Peffitory ofSediis,  
Stavesacre, *Cnidian* Grains, Mustard-seed, Rosemary-feed,  
Pigeons Dung, long Birthwort,. Verdegrife, *Cypriansstlify,*Rocket-seed, Cummin,, each sixteen. Drams; Nitre, Sal  
Ammoniac, each thirty-two Drams;. Manna of Frankin-  
cense, Bay-herritat Orris, each one hundred and cwenry  
shams.; of the strongest Vinegar, sixteen Pints; of aDes-  
coction of dry’d Figs, half a Pint:. Let five Pounds of fat  
dry’d Figs he helled insist Pints of Water to one Third.  
Let ell these, together with the Vinegar, he bruised and  
sifted, and then levigated in the Heat of the Dog-days.  
When the Medicine is grown dry, and looks green, pour  
upon it the .Decoction, of the dry’d Figs, and. fofnin in,  
**and then lay it up in a Box of red Copper.**

When Occasion requires, mix one Part Of this Medicine,  
diluted with V migar to a strigmenotious Consistence, with sot  
Parts of Wax and Colophony melted in a moderate Quantity of  
Oil If you would have in harder, take sour Parts to one of  
Wax and Colophony ; if you like it softer, take eight to one  
of the fame. It is said to he goad for malignant Tetters, if  
used with little Mixture. *Aetius, Tetr. 4. Serm.* 3. *Cap.* i6.

ANIDROS, άνιδρος, fweatless. From α Neg. and ἰδροω,  
to sweat. Ἀνιδρος πυρἱτος καὶ ᾶκείτος, in *Hippoc. de Bat. Vict.  
in Marb. Acut.* signifies a Fever protractsd to a great Length,  
without critical Sweats; because Nature has been disturbed by  
purging Medicines.

ANIDROSIS, ἀνίδρωοτστ, a Nullity or Privation of Sweat.  
*Hippocr. Li y. Eplalem.*

. ANIDROTI, ἀνιδρώτί, an Adverb expounded by *Galen in*several Places of his *Comment.* upon *Hippocr,* and by *Hesechius,*to signify *without Sweat.*

ANIL *Anil,* Garz. Acoil *Nil, Jive Anil,* Cam. *April,*Frago fo'. *Ceachira Indor. Annii five Indigo, Gali foot Nil, herba  
rorifmarini facie,* Linfc. 4. Part. Ind. Orient. *Herba Anil,  
Jive Enger,* 4. Part. Ind. Orient.

It is **a** Plant of *Erased,* about the Height of two Feet, **re.**sembling Rofernary; the Leaves are round, thick, the Flowers  
resembling these of Peas, and reddish ; they are succeeded by  
song and crooked Pods, containing Seeds like thofe of a Radish,  
of an Olive-colour. All the Plant hath a hitter and pungent  
Taste: They extrahi from it indigo. It is vulnerary, deterges  
and cleanses old Ulcers, bring applied in Powder on the Part:  
It is ufed allo as a Frontal for the Head-achi *Eemery de  
Drogues.*

*' Anil alia Species,* Marcgrav. *Caacbora secunda,* Pison. *An  
Glasie ajsasts,* C. B.

' It grows to the Height of two or more Feet; the Stalk is  
round, full of Joints, of a viscous, juicy, spongy, or Rced-  
Eke Substance. At the Joints of the Stalk and the Branches  
Sand two Leaves, directiy opposite, without Pedicles, of the  
Length of three or four Fingers Breadth, and narrow like the  
Leaves of yellow Willow-herb,'green, and set with short white  
Hairs on both Superficies, feeling a little rough. At the same  
Joints where the Leaves are, on cacti Side, grow two Pedicles,  
hear one another, standing upright, two or three Fingers Breadth  
long, and hearing atTop a round white Flower, *of* the Big-  
ness of a Daisy, 'with final! white Leaves, set round about with  
minute white Stamina. The Root is half a Foot long, or a lit- '  
tie more, somewhat bent, with few Sprays, of a viscous and  
ligneous Substance, and cover’d with a Bark of a dark Colour,  
which may he shipp'd off. The whole Plant, with its Root, is  
full of Juice; and if any one breaks the Stalk or Root, there  
immediately issues a Juice of an azure Colour.

’ They make *Anil* of it, only by bruising the Herb, and pout-  
ingWater on it. They then leave it to subside; and aster  
drawing off the Water, dry the Sediment in the Sun.

' This Plant is of a quite different Kind from the other And,  
**of** which they make indigo. *Raii Hist. Plant.*

The Plant Anil, the Method of extracting .its scecu-  
lent Parts, and'the several Ufes to which they are applied, have  
-been so often, and fo fully, insisted on by Phyficians andTravel-  
lers, that we have no Occasion to enter upon these Points at  
present.

τ Since the Medicinal Uses of Anil in the *Indies* are unimown  
to us, because of the Scarcity of this Plant; and since the so-  
**vend** Authors who have handed down their Accounts of it to  
as, differ from one another, not only with regard to its Descri-  
ption, but its Medicinal Virtues, we shall only mention such  
of its Properties, as are 'most uhiverially agrced upon by Botanists  
and Physicians. Tis then generally concluded, that a De-  
coction of its Root is good against a Nephritic Colic; thatjts  
Leaves, brained ‘and macerated in Water, are successfully ap-  
plied to the Belly in Suppressions of Urine., and that, applied  
by *wzy* of Catapiasin, they asswage and mitigato Pains of the  
Head. *Mem .An Ρ Acade Ac* I7I8. " \* -

. ANIMAL. Every organiz’d Body endowed with life, and  
spontaneous Monon, is call’d an Animal. Hence all Substances  
which are procured ’from Animals’, are said to belong to the  
Animal Kingdom, in Order to. distinguish them from others,  
which belong to the Vegetable and Mineral Kingdoms;

I. The Earth of Aninrals is not found to differ from that of Ve-  
getables in any respecti; hut thehissts Of Animals differ remark-  
ably’from these of Vegetables,'in bring volatile; that is, in  
rising by the Force of fine in Distillation T whereas these of  
tnost Vegetables;- before they have undergone Putrefaction, are  
dined, so as not to he capable of bring elevated by the most in-  
tenseFire. See AijALYsis. .

The Oils os Aiiiimass alfo are different from those of Vegeta-  
bles in many Particulars ; which are specified in the following  
Observations of *Haffman,* with respecti to Animal Oils.

' In all Bodies'produced by the Earth them is a set, oily, and  
in flammable Substance contain’d ; but this Substance is not con.  
fined to these Bodies alone, forSris forced in great Plenty in all  
Animals, of every Speciesneither is it possible to find an AIn-

ae ♦ . W.

Inal, that has not some Portion of Fat lodged in its internal  
Parts. **In** all their solid Parts also, in their Flesh, in **their**Benes, and even in their Fluids, duly drryd, this inflammable  
Principle discovers itself, since they are very easily made to  
flame, and allo yield a great Quantity of Oil in Distillation:  
But there is this Difference between Vegetable and Anfrool Oils,  
that the finer of the letter Sort are not, like the sooner, pro-  
cured by **a** moist, but by a dry Distillation, that is, by Com-  
bustion ; and for this Reofon, all Animal Oils have an ernpy-  
reumatic Smell, and strike the Nerves of the Nostrils in an un-  
grateful and disagreeable Manner.

Then again, all Fats and Oik, drawn from Animals, differ  
much in another rofpsci from those of Vegetables ; since the  
latter have a subtile Add intimately mix’d with them ., whereas  
the former contain, instead of that, a certain alcaline Principle. -  
An Acid manifests and discovers itself in Olis express’d from  
Seeds and Fruits; since thefe Oik, by remaining any consider-  
able time in Copper Vessels, extrait a greenish Colour from  
them, which can only be done by an Acid ; whereas the Fats  
of Animals, if kept for any time in Copper or Silver Vesseis,  
assume a beautiful blue Colour, which Effect can only he pro-  
duced by an alcaline Principle.

Besides, that the aethereal Oils of Vegetables contain a cer-  
tain acid Salt, is plain from the following Experiment: Let Salt ,  
of Tartar he levigated very finely on a *Marble,* let some  
distill’d Oil, that of Juniper, for Instance, Turpentine, or even  
Lavender, he dropp’d into it; continue the Trituration for  
some Hours, till such rime as the smallest oleous Particles are  
mixed with the lixivia! Salt, and the Mass assumes the Form of  
a Pultis; without the Oil being any more discovered. This  
Mass is to he exposed to the free Air, upon the Marble, *for R*considerable time, till the Salt, becoming dry, is again render’d  
capable of bring levigated ; after which, let it be a second nine  
impregnated with Oil. Let this Meshed be follow’d, till, at  
least, two Pounds of the Oil are absorb’d by one Pound of the  
Salt of Tartar. This Mass, when become dry, is to be dis- -  
solved in common Water, and, after Filtration, let the Water  
he drawn off; and then there remains a Salt of a neutral Na-  
ture, such as the *Arcanum Tartari,* or vitriolated Tartar.

Now there is no Doubt to he made, but this Acid, by means  
of which the Alcali was converted into a Substance of a neu-  
tral Nature, was originally contained in the Oil pour’d into it,  
since the Air alone could not possibly produce such an Effecti ;  
however, I don't deny but the universal Acid, contained in  
the Air, concurs, and has its proper Influence in this Affair.

That an Acid enters the Composition even of the finest Oils,  
is plain from an Experiment, in which is shewn, that the  
most highly rectified Spirit of Wine may, by the Addition of  
the most acid Oil Of Vitriol, he converted into the most subtile  
and penetrating Oil.

Butinthedlstilled Oiis of Animals the Case is quite different;  
for they are richly impregnated with a volatile Salt, winch may  
he drawn from them in great Plenty; and, which is more, the  
distill’d Oils of Animals, that of Hartshorn, for Instance, *os*Ivory, if long digested with a lixivia! Sals, are thernfelves **con-**verted into volatile Salts. -

The volatile alcaline halt, therefore, contained in the Oils **of-**Animals, is the Reason why they are far more subtile and pene-  
trating than the distill’d Oils of Vegetables, and have **a more**iinmediateTendency to put the Mass of Blond into a CommOr  
tion; for ’tis well Known, that the most highly rectified Spirit  
of Wine quickly imbibes and resolves Oiis extracied. from  
Animal Substances, that of Ivory, for Instance, Worn», or  
Hartshorn; but yet in inch a Manner, that a few Drops of  
these Oiis not Only tinge a great Quantity of this Spirit, **but**also communicate an adventitious Taste and Quality to it.; **for**three or lout Drops os these Oiis are .sufficient for tinging *zt*least three Ounces Of the Spirit of Wine with a brownish CO  
lour. ‘ i

Hence we plainly discover the sirbtile Nature, and the Small-  
ness of the Parts, of these Oiis, which entirely preserve their  
original Texture and Qualities ; for two small Drops of the Oil  
of Hartshorn, intimately mix’d with half an Ounce of highly  
rectified Spirit of Wine, are sufficient to.produce a copious and  
plentiful Sweat, if divided into four Doses, and exhibited in  
four disserent Men. Hence we learn, how cautious Physicians  
ougni to he in prescribing these Oils, especially for young Peo-  
ple, and in Distempers accompanied with intense and preter-  
natural Heat: Henco we also discover the Reason, why Oils  
are fo powerful and efficacious in discussing and resolving Tu-  
rnors, which will not yield to any other Medicines.

But whet most of all deferves ourAttention is, **that** all **Oils,**cxtractsd from Animal Substances, may, by a frequent and **rev**iterated Rectification, acquire filch a Degree Of Subtilty as to he  
able, if exhibited in a pretty large Dose, to eradicate the most  
terrible and inveterate Disorders.

The Preparation is made thus;

Take any Oil distilled from Animal Substance, that of ha.  
**nan** Blood, fer Instance, that of Worms, Ivory, or Harts-

hem; and, without the Addition of any thing, let it he  
drawn off from a Glass Retort, and rectified to such a De-  
gree, that no black and burnt Fceces may remain in the  
Bottom, which can scarce he obtain'd by twelve repeated  
Distillations.

This Oil, which was formerly thick, and of a disagreeable  
and foetid Smell, gradually assumes a more grateful one, and  
becomes more pungent to the Taste.

Twenty or more Drops of such an Oil, taken on an empty  
Stomach, before the Access of an Intermitting Fever, bring on  
a calm and gentle Sleep, and wonderfully carry off feverish  
Disorders. This is also an efficacious Medicine for the Cure os  
Epilepsies of long Standing, and allaying convulsive Motions,  
especially when taken before the ordinary Time os the Access,  
and when such Medicines are previoufly used, are aS proper for  
evacuating the too great Quantity os Humours.

It produces its Effects by its gentie, safe, anodyne, and som-  
niferous Qualities; for it induces a calm and pleasant Sleep,  
which often lasts for twenty Hours, and which is so far from being  
followed by Drowsiness, Torpor, and Weakness, that it rather  
exhilarates and enlivens the Body. Besides, it promotes a gen-  
tie Sweat, without increasing the Heat of the Blood. The  
Effects produced by this Medicine are owing to die prodigious  
Smaliness of its sulphureous Parts, occasioned by its frequent and  
reiterated Rectifications j and fince its sulphureous Particles, in  
consequence of their Subtil ty, penetrate all the smallest Mean-  
ders os the Parts, and diffuse themselves thro\* the whole Mass  
Us Humours, the Tensity and Elashcity os the *Dura Motor,* and  
of 'the whole nervous and’ membranous System, the'depraved  
and preternatural spasmodic Motion of which is the very Es.  
fence and Cause *os intermitting Fevers, and* epileptic Motions,  
are by this Medicine so much changed and diminished, as after-  
wards to become unsusceptible os such spasmodic Motions.

By this chymical and practical Observation, we are taught,  
that uncommon Medicinal Virtues are treasured up in the mi-  
nutest Particles of sulphureous and oily Substances j which Cir-  
cumstance is owing to their reaching the inmost Recesses os the  
solid Parts, especially those of the Nerves and Membranes; upon  
the due Tone and Motion os which, almost all the Functions  
and Motions os our Bodies depend.

- This Experiment, and practical Observation alsosc proves,  
that the hottest Medicine, and such as, when administer'd in a  
very small Dose, is sufficient to throw the whole Mass of Blond  
into a vastly quick Motion, may be render'd so mild arid safe,  
that, when exhibited in a larger Dose, it shall beso Very sar from  
increasing the Motion of the Blood, that it will rather quell it,  
and induce a moderate Calm; and we plainly find, that this  
Circumstance is owing only to the Change produced in theTex-  
ture os the Medicine; that is, by rendering the tenacious Viscid  
Oil aS subtile as possible.

-In fine, this Experiment explains and accounts for the ano-  
dyne and somniferous Qualities os Camphire, which is no more  
than a most subtile coagulated Oil, when used prudentiy, and  
as Exigencies require. *Hoffrnan. Observat. Physuo-Chym. L.* I.  
C.I5- ἐν '

The rectified Oil, above describ'd, is certainly possess'd of  
many and considerable Virtues. Its Character is, that it is a  
most excellent Remedy against the Plague, or any pestilential  
Disorder: It cures the Pleurisy, it strongly fortifies Nature, it  
cheats the Heart, and revives the Spirits; it causes a free Cir-  
culation of the Blood, and thoroughly purifies the whole Mass,  
and Clears the Skin from Erysipelas, Scurss, and Scabs. It  
cures the Itch, scald Heads, Tetters, Ring-wonns, *etc.* It is  
most powerful in the Cure of the Leprosy and elephantiasis; it  
opens the Obstructions of the Liver, and Spleen ; it cures all the  
Disorders of the Head and Brain, aS Lethargies, Apoplexies,  
Megrims, Vertigoes, Convulsions, Palsies, *etc.* It strengthens  
the Stomach, and helps Digestion;Ft surprisingly prevaiis in  
Paintings, Swoonings, and Palpitation of the Heart. A safer,  
speedier, better, or more effectual Medicine, is not to he found  
in the whole Art of Physic: Its Dose is from twenty to thirty  
Drops upon a Lump of Sugar,, drinking after it a Glass of  
Wine. ..

' ANIMAL BEZOARTICUM Orientale. The Bezoar  
Goat. SeeBEaOAR.

ANIMAL BEZOARTICUM Occidentale. The jester  
*American* Deer. See BEzoAR.'

ANIMAL MOSCHIFFRUM. The Mush Animal.’ See'  
**MOSCHUS. . .**

ANIMAL ZIBETHICUM. The Civet Cat. See ZI-

**BETHUM. . ' ν .**

' ANIMALCULE. These who here made the most minute  
Researches, and the most accurate inquiries, into the Natures  
of the several Objects subjected to their Senses, have found,  
that, the Substances upon which they employ'd their Curiosity,  
were often quitedifferent from whas, at fust view, they appear'd  
to he. Thus, sot Instance, the whole Earth has been sound  
replenish'd with an inexhaustible Store of whet we should least  
Of all suspect, that is, an infinite Number of Animalcules float-

ing in the Air we breathe, sporting in the Fluids we drink, or  
adhering to the several Objects we see and handle. The Con-  
jectures and Hypotheses relating to the Preduction, Generation,  
Structures, and Uses of these Animalcules, have been as various,  
and perhaps aS sar remote from Truth, aS any that ever were  
either contrived by the Coprice, or embraced by the Credulity,  
of Mankind: But Conjectare, Obscurity, and Darkness, are  
now, in a great measure, banished from this Branch of Learn-  
ing; since, by the Assistance of Microscopes, we not only know,  
that these Animacules exist, het are also enabled to discover  
their particular Shapes, and Various Degrees of Motion.

Water, the simplest and least compounded of any Fluid we  
are yet acquainted with, not only contains a large Number of  
these Animalcules, but also proves a proper Medium for their  
Multiplication.

This is confirmed by a Story told of a Gentieman, in the  
*History of the Royal Academy of Sciences for* I 707. who ima-  
gined, that, in some os the Experiments he had made, the Ani-  
malcules, discovered by a Microscope in Water, did not multi-  
ply in it, but that they proceeded from certain small and invisi-  
ble Flies, which laid their Eggs in the Ain; and that since these  
Animalcules were a Species of small Worms, they might natu-  
rally he supposed, aS well as some other Worms, to proceed  
from some wing'd Species of Insect. But he was convinced of  
his Mistake by the following experiment: He boiled Water and  
Dung, mixed together, and filled two equal Phials with it: .  
When the Liquor, contain'd in these Phials, was become tepid,  
he put into one of them two small Drops of Water, taken from  
a Vessel, the Water of which was stored with Animalcules;  
and eight Days after he found that same Phial stock'd with an  
infinite Nurnher os Animalcules, of the same Species with those  
contain'd in the Liquor, from winch the two Drops of Water  
had been taken. As for the other Phial, nothing of the like  
Nature was discovered in it, the’ the Dung, as one would have  
thought, might have, in all Appearance, produced some Ani-  
malculcs. Both Phials had heen Very carefully stopp'd. This Ex-  
periment, then, establishes the Multiplication os these Animal-  
cules in the Water; but it will he mote effectually confirm'd,  
if whet this Philosopher asserts be true, that he saw them copu-  
late. True it is, he saw them unite by Pairs, one may readily  
say, but it was perhaps to beat one another; but why should  
they never beat one another, except in Pairs so

If then Water, the most simple of all other. Fluids, thus  
abounds in Animalcules, and proves, if I may so speak, a pro-  
per Medium for their Preduction and Multiplication, how much  
more must we suppose this to be the Case with other Fluids of a  
richer Texture, and a more compound Nature ? What, *for*Instance, must we think os the Vast Store, and surprising Va-  
riety, of Animalcules contained in that heterogeneous Fluid the  
Air ? WhatNumhers os them must he contained in fermented  
Liquors, generous Wines, and Acids of every Kind? How  
must they abound in the Testicles, the Seed, and other Juices  
of Animals? What must their Number he in Fowis and Fishes, '  
and even in Reptiles, and in insects of the most small and incon-  
siderable Size ? However romantic this may appear to one unac-  
customed to pry into the hiddenWonders of the Works of Na-  
ture, 'tis nevertheless sar from heing one of those curious Hypo- .  
theses, which tantalize the Mind with delusive Appearances of  
Truth for a while, and leave it at last to sit down in a defected  
State,and hewail its want of Evidence; for Mr. *Leweahoeci,*that great Enricher of Natural History, and accurate Observer  
of the minutest Works of God, has subjected these Matters to  
the Evidence os Sense ; and even given an irrefragable Demon-  
stration that the Number of Animalcules Contain'd in theSeed os  
one Cod-fish, is more than ten times that of all the Men living  
upon the whole Surface of our Globe. " : ' si

' in short. Animalcules abound so much in every Part of Na-  
ture, that the Very Food we use is mix’d and incorporated  
with the Eggs laid by them. Thus Air. *Hamberg* (in the  
History of the Royal Academy os Sciences for I707) acquaints  
us with the Case of a young Man of his Acquaintance; who  
enjoy'd a Very good State of Health, and discharged every Day  
by Stool, for the Space os sour or five Years, a great' Num-  
ber of Worms five or six Lines long, tho' he eat neither Fruit  
nor Sallad, and us'd all the Medicines that could possibly, he  
thought of, in order Io perfect his Cure. He once or twice  
also discharged an Ell and a haff of a flat knotted Worm, call'd  
by the *French, Solitaire. Esoas* this he thinks we have Reason  
to conclude, that there are Vast Stores of’ the Eggs os Insects  
mix'd with, and treasur'd up in, all those Aliments, where we -  
least suspect them; and that nothing is wanting but a Stomach,  
or an Oven, as it were, to hatch them. ' /

Our own Philosophical Transactions give very surprising Acr  
counts of small Animals found in Various Substances, and. Of  
different Sorts. Thus am anonymous Author takes notice of.a  
very extraordinary Insect found amongst Sand.

AS we examin'd, says he, with an excellent Microfcope; seine  
little *Grains of* Sand fearced, we perceived an Animal with  
many Feet, its Back white and scaly, bur less than any of  
those hitherto observed. For altho' the Microscope shewed

every Grain of Sand as big as an ordinary Nut; yet this Ani-  
mal appeared no bigger than one os those Grains of Sand scan  
without a Microscope.

. Mr. *Jo Hitrris* also gives the sollowing Account of Ani-  
malcula *Jody J.* rtiQ4 *. I* examin'd a small Drop of Rain  
Water, that had stood in a Gally-pot in my Window for  
about two Months. I took it (with the Head of a small Pin)  
from the discolour'd Surface of the Water, and in it I observ’d  
four Sorts of Animals. In the clear Parr of the Drop were  
two Kinds, and both very small. Some were of the Figure of  
Ants eggs; these were in continual Motion, and that very  
swift . And I find, that this Kind of e.?] Figure is the most  
common to the Animalcula found in Liquors. The other Sort,  
that were in the Clear of the Drop, were much more oblong,  
about three times as long as broad : these were exceeding nu-  
merous, but their Motion was flow, in comparison of the  
former. '

In the third Part of the Drop (for the Water, from whence  
I took it, had contracted a thiclrish Scum) I found also two Sorts  
os Animals, as a kind os Eels, like those in Vinegar, het much  
smaller, and with thin Extremes more sharp. These would  
wriggle out into the clear Part, and then suddenly betake them-  
. selves back again, and hide in the thick and muddy Part of the  
Drop, much like common Eels in the Water. J saw here also  
an Animal like a large Maggot, which would contract itself up  
into a spherical Figure, and then stretch itself out again : the  
End os its Tail appeared with a Forceps, like that os an Ear-  
wig ; and I could plainly see it open and shut its Mouth, from  
whence Air-bubbles would frequently he discharged. Of these  
I could number about four or five, and they seemed to be busy  
with their Mouths, as is feeding... .’ .

.. These four Kinds of living Creatures I found afterwards  
also in many other Drops of the same corrupted Water; that  
is, in its Finn, or Scum which was on the Surface. For under  
that, in the lower Parts of the Water, *I* could never find any  
Animals at all, unless when the Water was disturbed, and the  
Surface shaken down into, and mingled with, the lower Parts.

*April οη.* I696. With a much hetter Microscope, I exa-  
mined some Rain-water that stood uncover’d a pretty while,  
hut had not contracted any such thick and discolour'd Scum,  
as that before-mentioned had. In this, where it was clear,  
1 could not find any Animals at all: But a littie, thin, white  
Scum, that, like Grease, hegan to appear on the Surface, I  
found to be a Congeries of exceeding small Animalcula os dis- .  
Terent Shapes and Sizes, much like those produced by steeping  
Barley in Water.

At the same time I look'd on a small Drop os the green Sur-  
sace of some Puddle-water which stood in my Yard : Tins I  
sound to be altogether composed of Animals os several Shapes  
land Magnitudes ; but the most remarkable were those which I  
sound gave the Water that green Colour, and were oval Crea-  
tures, whose middle Part were of a Grass-green, but each End  
clear and transparent. They would contract and dilate them-  
selves, tumble over-and-over many times together, and then  
shoot away like Fishes : their Head was at their broadest end ;  
for they still moved that Way. They were very numerous,  
but yet so large, that I could distinguish them very plainly,  
with a Glass that did not magnify Very much. Among these  
were interspersed many other smaller and transparent Animals,  
like those mention'd but now, as found in the whitish Scum  
that was on some Rain-water which had stood a while un-  
covered. - --

*April* 29. I769. I found another Sort of Creatures in the  
Water (some of which I had kept in a Window, in an open  
Glass); they were as large as three os the other, with a green  
Border about their Middles, but these were perfectly clear and  
colourless.

Then also examining more accurately the Belts,' or Girdles,  
or Green, that were about the Animals mentioned above, I  
found them to be composed of Globules, so like the Rowes or  
Spawn os Fish, that I could not but fancy they served for the  
Janie Use in these little Creatures. For I sound now, fince  
*April* 27. many of them without any thing at all of that green  
Belt or Girdle; others with it Very much, and that unequally,  
diminished, and the Water filled with a vast Number os small  
Animals, winch before I saw not there, and which I now look'd  
on as the young animated Fry, which the old ones had shed.  
I continued looking on them, at times, for two Days; during  
which Time, the Number of the old ones, with the green  
Girdles, decreased more and more, and at last I could not *see  
one of* them so encompass’d, but they were all clear and colour-  
less from end to End.

*May* I8. I696. I look'd on some os the Surface of Puddle-  
water, which was bluish, or, rather, of a changeable Colour,  
between Blue and Red ; in a very small Drop os winch I found  
prodigious Numbers of Animals, and os rations Bignesses.; but  
~ among those were none with those Girdles before-mentioned,  
either of Green or any other Colour.

I then also examined the Surface of some other Puddle-water,  
that look'd a little greenish ; and this I found stock'd with such

infinite Numbers of Animals, that I never saw the like any.,  
where, but in the Genitura Masculina of some Creatures.  
Among these there were Very many of a greenish Colour - but  
they all moved so strangely swift,.and were so ncar Io ^ch  
other, that the’ I tired my Eyes, I could .not distinguish whe-  
ther the green Colour were all oyer their Bodies, or whether it  
were only round their Middle in Girdles, as before. BUt from  
the Roundness of their Figure, and. their Smallness, I judge  
that they chiefly consisted of the young animated Spawn of that  
Kind of Animals I mention'd above. I found, that the Point  
of a Pin dipp'd in Spittie would presently kill them all, aS I sup-  
pose it will other Animalcula of this Sort. . .

The same Day also I looked on the Surface of some Mineral  
(Chalybeate) Water, which had stood in a Phial stopp’d for  
about thee Weeks; in it I saw two Kinds of Animals, one  
exceeding small, and the other very large which latter Sort  
had on the Tail something that looked like Fins. There were  
but Very sew of either Sort..;- . . ; .

The compounded Salt, Or Vitriol of the Water, was shot  
into pretty Figures, hut all irregular. They looked all like a  
small Heap of littie Sticks, laid across each other at all Angles  
and Positions; only they were transparent, and a littie greenish,  
aS Crystals of a chalybeate Nature use to be. .

I infused whole Pepper-corns,' Bay-berries, Oats, Barley,  
and Wheat, in Water, whose Scum, after two or three Days,  
afforded Animals, aS hath been often already found by others,  
at least, aS to some, of them: But I found the greatest Num-  
hers and Variety in Wheat and Barley Water, and the fewest  
in that wherein Bay-berries had been steeped.

How such vast Numbers of Animals can he thus (aS it were,  
at Pleasure) produced, without having recourse to equivocal  
Generation, seems a very great Difficulty to account *for. But*though the solving os it that way makes short Work of the  
Matter, (for 'tis easy enough to say, they are bred there by  
Putrefaction) yet the asserting equivocal Generation seems to  
me to imply more Absurdities and Difficulties, than perhaps  
may appear at first Sight: I wish therefore, that this Matter  
would a while employ the Thoughts of some ingenious and in-  
quisitive .Man. In the mean time, I have conjectured, that  
these Animalcula may be produced by one or both of the fol-  
lowing ways:

I. I heve thought, that the Eggs os fome exceeding small  
Insects, winch are Very numerous, may heve heen laid or lodged  
in the Plicae, or Rugae, *os* the Coats of the Grain, by some  
Kinds that inhabit on those Seeds, aS their proper Places.  
For that Insects of the larger Kinds do frequentiy thus depo-  
fit their Eggs on the Flowers and Leaves of Plants, is often  
experimented; and 'tis Very probable, that the smaller or Ini-  
croscopical Insects do the same. Now these being washed out  
of the Seeds, by their immersion in Water, may rise to the  
Surface, and there be hatched into those Animals winch we see  
so plentifully to abound there. \*

2. Or the Surface of the Water may receive the straggling  
Eggs of some microscopical Insects, that perhaps were about in  
the Air, and being fitted and prepared for this Purpose, by the  
Infusion os proper Grain, or a proportionable Degree of Heat,  
may compose so proper a Nidus for them, that they may by  
the Warmth os the Sun be easily hatched into living Creatures,  
which, it is probable, (like the strange Water-insect, from  
whence a Gnat is produced, mentioned by the learned Dr. *Hook,*in his *Mtcrographia,* whose Metamorphosis I heve often with  
Pleasure seen) may afterwards turn into Flies, or winged In-  
sects of the fame Species of the Animal Parent. And, perhaps,  
sometimes, both these Circumstances, and other of the like  
Nature, concur for their Preduction. .

*Mr.* Gray's *Account of Animalcula.*

I have observed in Haemisphaerules of Water, duly apply'd to  
the End of a Wine, two Sorts of microscopical Insects, glo-  
bular and elliptical. Those of a globular Form are but littie  
less transparent than the Water they swim in; they have some-  
times two dark Spots diametrically opposite, but these are rare-  
ly seen ; there are sometimes two of these globular Infects stick-  
ing together; where they are joined, 'tis opacous : possibly they  
may be in the Act of Generation. They have a twofold Mo-  
tion, a swift progressive irregular one, and at the same time a  
Rotation on their Axes at Right Angles to the Diameter that  
has the dark Spots: But this is seen only when they move flow-  
ly. They are almost of an incredible Minuteness. .

I heve examined many transparent Fluids, aS Water, Wine,  
Brandy, Vinegar, Beer, Spittle, Urine, *etc.* and do not re-  
member to have sound any of them without more or less of the  
Bedies of these Insects; but I have not seen any in Motion,  
except in common Water, that has fined for sometimes a longer,  
at others a shorter time, as has been observed by M. *Laewen-  
hoeck*; though I do not reinemher he has observed, that they  
are existent in the Water, hefore they revive. In the River,  
aster the Water has been thickened by Rain, there are such  
infinite Numbers of them, that the Water seems in great part  
to owe its Opacity and Whiteness to these Globules.' Rain-

water, so soon as It fells, has many; and Snow-water has more,  
of these Globules. The Dew, that stands on glass Windows,  
has them; and forasmuch as Rains and Dews are continually  
ascending or descending, I believe we may say, the Air is full  
of them. They seem to he of the same specific Gravity with  
the Water they fwirn in, the Dead remaining in all Parts os the  
Water. Of many Thousands that I have seen, I could discern  
no sensible Difference in their Diameters, they appearing of  
' equal Bigness, in Water that has been boiled, they retain their

Shapes, and will sometimes revive.

There is another Sort of Insects I have this way seen, but  
these are not so frequently (at least this Winter-season) to he  
found; they are much longer than the former ; they can trans-  
form themselves into many Shapes; they are for the most part  
elliptical; het sometimes they contract themselves so aS to he  
almost globular; and sometimes they contract themselves so, as  
to he twice or three times longer than broad ; these sometimes  
turn themselves round on their Axes and Diameters aS they go;  
they consist of transparent and opacous Parts. *Philos. Trans.  
Abr.Fol.2.*

*Sir* Edmund King’s *Observations ofAnimalcula.*

Having steep’d Oats in Rain-water some Days, (Perham nine  
or ten) and looking upon it with my bare eye, I saw a Sub-  
stance, .that seemed to me like that usually called a *Mother*son other Liquors); and laying aS much of it as a small Pinis  
Head upon the Object Plate of:my best Microscope, I could  
very easily discern seven or eight Sorts *of Animalcula* of differ-  
ent Sizes and Shapes (or more) swimming in this Substance.  
.Thein Shapes and Sizes were aster this manner, as near as I  
could guess: They were all Very nimble in their Motions, by  
Computation, seven thousand times magnified. ....

\* The thin Scum upon a Pepper-water, that resembled Flakes  
of Salt upon some Sorts of human Urine, applied in the same  
manner to the Object Piste of the Microscope, was only  
Clusters of *Animalcula,* that had liquid Matter enough to swim  
in; and I was in Admiration at their Numhers, Motions, Va-  
riety, and Minuteness.

in a Decoction of Herbs, that was strained, and set by for a  
particular Use; in a littie os the Settling of that, (as much aS  
a Pin’s Head) I saw Creatures like little Eels, which seemed  
*io* he sharp at both ends, with a wriggling Motion.

. I observe these small Creatures above-mentioned (if I may  
so call them) resemble the Nature of Fish, in several respects:  
*. I.* They’ll flock together, and lie close together, as if they  
were in Shoais like Carps in a Pond, that has heen shallow,  
aS I have often seen, sometimes in one Pisce, sometimes in an-  
other ; but when disturbed, they are, aS to your Sight, all di-  
spersed and lost in a trice; and so are these littie Creatures in  
.their original Liquor, if you shake the Liquor hefore you look  
- to find them in Shoais, or after; at least, I am sure I did, and  
could never find any in that Parcel .of Liquor, till next Day, or  
prill'they associated again.

. 2. They wifl follow their Liquor, to act in, to the last Par-  
ficle os it, till they have no more to swim in, and then will  
seem to struggle for want of it, till their Strength saiis them,  
and then after a Minute they will seem dead upon the Object  
Flate, when the watry Parts are dried away. . .

3. They will lie aS if they were dead, near half an Hour, or  
more ; then put a littie Water to them, in half a Minute they  
will begin to move themselves again, and by Degrees begin to  
fwim faintly and feebly at first (as Fish will do); then recover-  
ing their Strength again, will perform then brisk Motion as  
xigoroufly as ever. νοῦ. .

4. Those that are almost dead, will look flat, aS if pressed  
thin; but when they move, turn themselves over and over,  
without any regular Motion; so that you might see them as  
thin as the thinnest Spangle you eVer saw, and like it in Shape;  
and they will continue so, so long as they are saint and sick:  
But within about an Hour's time, they will grow plump and  
. well again, if you add fresh Liquor to them in time.

- These *Animalcula* chuse, for the most part, the Top of the  
Liquor ; I suppose, for the sake of the Ain ,

If you perceive them lie dead upon the Object Plate, as I  
did, and do not rememher to add Water to revive them, with-  
in an Hour, they will be dead indeed : But you may see them  
in the Posture you left them, many Days after.

Now to give farther Testimony, that they are Animalcula,  
winch some doubt, I have noted the following Observations: .

. If you take a fine Needle, and put the Point into Spirit of  
Vitriol, though you can see none of the Spirit with your bare  
Eye upon its Point when you take it out, yet if you prick the  
same Point os that Needle into the Middle of that Drop, no  
bigger than a small Pmss Head, when some Hundreds of these  
*Animalcula* ate swimming. Very nimbly friflring about, you  
shall immediately see these minute Creatures (if I may so call  
them) presently affected from the acid Particles, so aS to spread  
themselves, and tumble down seemingly dead.

. If you dissolve Salt, and, with the Point of the same Needle,  
repeat the Experiment (in the same manner) in some of the

same Liquor that contains some of the same Parcel of *Animal-  
cula, you* shall see the Creatures afore-mentioned he affected  
too, stop in their Motion, but in another manner quite; not  
spread flat, as those with Spirit of Vitriol did, but shrink long  
and round, in Form and Figure of that we call whole Oatmeal,  
or an excoriated Oat. And whereas the first with the Spirit sell  
down flat without turning; these, as soon as affected, turn  
round, when they begin to he sick, and wabble, as we lay,  
before they fall down to the Bottom and die, unless you quick-  
ly recover them with fresh Water, and then you will perceive  
them get a new Life by Degrees.

Tincture os Salt ofTartar, put into them in the same manner,  
kilis them more immediately; hut yet they will he first so sick,  
or so affected, call it what you please, aS you may see by a  
surprising convulsive Motion, they will grow saint and languid  
apace, as you may see them fell to the Bottom of the Drop  
upon your Object Plate dead, but in their own Shape, aS they  
were before you applied your Needle; and will neither he flat,  
as with Spirit of Vitriol, nor cylindrical, as with common  
salt Liquor.

Ink kilis them as soon aS Spirit of Vitriol, but makes them  
seem to shrink divers ways; I suppose by the Solution, os Cop-  
Peras, which is in its Composition.

Blood (newly pressed from a Prink, purposely made in your  
Finger) kills them almost as soon as Spirit os Vitriol, by reason  
(I suppose) of the Salt therein : But it is a fine and surprising  
Sight, Io observe them fwimming and bustling, first among the  
Globules of the Blood Jostling one another, like Fish that are  
suddenly deprived of Water, and bustle together amongst Mud ;  
*for so* they appeared to me. '

Urine kilis them too, in a littie time, tho\* not so soon.

Sugar, dissolved like Salt, kilis them also, if used in the same  
manner, and with that some die flat, and some die round.

Sack will kill them, but not so speedily aS the other Liquors.  
*Phil. Trans. Ala. Vide ig. "* S

*Animalcula in the Itch, by Dr.* Bononio. . .

I found an itchy Person, and asking him where he felt the  
greatest and most acute Itching, he pointed to a great many  
Pustules not scabbed over; os winch picking out one with a Very  
fine Needle, and squeezing from it a fine Water, I took out .a  
Very small white Globule, scarcely discernible. Observing that  
with a Miscroscope, I sound it to he a Very niinute living Cream  
ture, in Shape resembling a Tortoise, os whitish a Colour, a  
littie dark upon the Back, with thin and long Hairs, of nim-  
ble Motion, with six.Teet, a sharp Head, with two little  
Homs at the End of the Snout. . . -

Not satisfied with the first Discovery, I repeated the Search  
in several itchy Persons os different Age, Complexion and Sex,  
and at differing Seasons of the Year, and found in all the same  
Anirnais, and that inmost of the watry Pustales ; for now-and-  
then, in some few, I could not see any.

And though by reason os their Minuteness, and Colour the  
same with the Skin, 'tishard to discern thefe Creatures upon the  
Surface of the Body; nevertheless I have sometimes seen them  
upon the Joints of the Fingers in the littie Furrows of the *Cu-  
ticula,* where with their sharp Head they first begin to enter,  
and, by this gnawing and working in with their *Body,* they  
cause a troublesome Itching, till they are got quite under the  
*Cuticula ,* and then 'tis easy to see, hew they make Way’S from  
Placeto Place by their biting and eating, one singleOne happen-  
ing sometimes to make several Pustales, Of .which I have osten  
found two or three together, and for the most part Very near  
to one another. v ‘

I examined whether or no these Animalcules laid eggs, and  
at last; from the hinder Part I saw drop a Very small and scarce-  
ly visible white egg, almost transparent, and oblong, like  
the Seed of a Pine-apple. I oftentimes sound these eggs after-  
wards, from which, no doubt, these Creatures are generated.

From this Discovery it may he no difficult matter to give a  
more rational Account of the Itch, than Authors have hitherto  
delivered ; it bring Very probable, that this contagious Disease  
is no other than the continual Biting of these Animalcules in  
the Skin, by means of which some Portion of the Serum  
onfing out through the small Apertures os the Cutis, little  
watry Bladders are made, within which the Insects continuing  
to gnaw, the. Infected are forced to scratch, and by Scratching  
increase the Mischief, and thus renew the troublesome Work,  
breaking not only the little Pustules, but the Skin too, and  
some littie Blood-vessels, and so making Scabs, crusty Sores,  
and fitch-like filthy Symptoms.

From hence we come to understand how the Itch proves to  
he a Distemper so Very catching, since these Creatures, by sim-  
ple Contact, can easily pass from one Body to another, theirMo-  
tion being wonderfully swift, and they aS well crawling upon  
the Surface of the Body as under the Cuticula, being Very apt  
to stick to every thing that touches them ; and a very few of  
them being once lodged, they multiply apace by the Eggs which  
they lay. Neither is it any wonder, if this Infection he pro-  
pagated by the means of Sheets, Towels, Handkerchiess,

Gloves, *etc.* used by itchy Persons; it being easy chough **for**some of these Creepers to he lodged in such things as these;  
and indeed I have observed, that they will live out of the Body  
two or three Days.

- Nor shall we he at a Loss to know the Reason of the Cure  
of this Malady, by Lixivials, Washes, Baths, and Ointments  
made up with Salts, Sulphurs, Vitriols, Mercuries Simple,  
Precipitate or Sublimate, and Inch Sort of corrosive and pene-  
trating Medicines; these bring infallibly powerful to kill the  
Vermin lodged in the Cavities of the Skin, which Scratching  
, will never do, partly by reafon of their Hardness, and partio  
hecause they are so minute as scarcely to he found by the Nalls.  
Neither do inward Medicines perform any real Service in this  
Cafe. And if in Practice we oftentimes experience, that this  
Disease, when we think it is quito cured by Unction, does  
nevertheless in a short nine return again, .this is not strange,  
since though the Ointment may have killed all the living. Crea-  
tores, yet it may not probably have destroyed all their Eggs,  
laid, as it were, in the Nells of the Skin, from which they  
may afterwards breed again, and renew the Distemper. And  
upon this Account, ’tis very adviseable, after the Cure is once  
performed, still to continue the Anointing for a Day or two  
more; which it is the easier to do, hecause these Liniments  
may he made agreeable enough, and of a good Smell, as par-  
ticularly is that compounded of the Ointment of Orange-flow-  
ers, or Rosts, and a small Quantity of red Precipitate.' *Phil.  
Traof. Abr. Vtl. 4. . - -*

*Liewenhoeck* calculates, theta thousand Million of Animal.  
cula, which are discovered in common Water, are not, altoge-  
ther, fo large as a common Grain of Sand. This Author, upon  
examining the Male Sperm of various Anirnais, discovered, in  
many, infinite Numbers of Animakula, not larger than thefe  
above-mentioned. The white Matter allo, which sticks to the  
Teeth, abounds with Animalcule of various Figures, to which  
Vinegar is fetal. And we have seen under the Article Acetum,  
that Vinegar contains Animalcule in the Shape Of Eels. In  
short, there is scarcely any thing which corrupts, without pro-  
ducing Animalcules; but I am not yet setisfy’d, that Animalcule  
are discoverable in any Animal Substance in Nature, which is not  
in a State of Putrefaction, notwithstanding whet the Author  
abovequoted has asserted. It iscertain, that Animal Substances  
very soon incline to Putrefaction, and the Sperm the soonest of  
all others, that is, in a very few Minutes, or perhaps Moments.  
**I** would not from hence infer,’ that Animalcules are generated by  
Putrefaction ; but I am inclined to think the Heat necessary to  
Putrefaction may hatch the Sceds of Animakula deposited in vari-  
ous Substances thus putrefy in ; and perhaps thefe Substances  
may afford them a convenient Medium to subsist in.

‘ - But as most Discoveries in Natural Philosophy have laid a  
Foundation for the warm Imaginations of feme Men to build  
a lame Theory upon, to the great Prejudice of real Knowledge;  
so those relating to Aninraleula have heen drawn in, however  
improperly, to support the most whimsical and chimerical  
Systems. . - . . . . .

Thus some have-asserted, that the Animalcules found in the  
Sperm of Male Animals, were the future Animals in Minia-  
ture j and that by thefe Generatinn was perform’d. Others  
have attempted tO prove, that all Difeafes were produced by  
Animalcule, not considering that these, when sound in the pu-  
trid Parts of Animais, were the Effects, and not the Caufes of  
Distempers. Thus *Default* has with much Labour endeavour-  
ed to make it appear, that the Venereal Disease, and Hydro-  
phobia, were caused by Animalcule; and I rememher somewhere  
to have met with a Theory of the Plague, which makes that  
terrible Disorder produced by Insects brought by the East  
Wind. - si

- ANIMALIS FACULTAS, *vel* VIRTUS. The Animal  
Faculty, or Power. See **FACULTAS.**

ANIMALIS MOTUS, Animal Motion.

ANIMALIS SPIRITUS, Animal Spirit. **SeeSprRiTUS.**

ANIMATIO, Animation ; an enigmatical Word used by  
the Alchymists in the Assair of Transmutation ofMetals, when  
the white foliated Earth is to he fermented with the phi-  
losophical or celestial Water of Sulphur. Mercury is said to he  
. animated, when, by Conjunction with a perfecti Mend, itiste-  
duced to a certain Species. *Libav. Apoc. Hiermet. Part.* I. *Cape* Io.  
Such a Mercury is wanted by the Spagirins to help them to the  
Philosophers Stone.- *Castellus.*

ANIME. *Anime gummi, Gummi Arninea,* Serac. *Minea,*Galeni. *Arninea, Myrrha,* Ces. *Anianum,* Amato.

r Is a Gum, or white Resin, brought to us from *America,* it  
flows from an incision made in a Tree, of a moderate Bigness,  
the Leaves of which are much like these of Myrtle; its Fruit  
is Of a good Size, and called *Libia. '*

The best Gum Anime ought to he white, dry, friable, clean,  
of a good Smell, that soon consumes when thrown into **the**Fire': It contains a great deal of Oil, and essential Salt.

Iris proper to dilcuss, to soften and dissipate cold Humours,  
for the Head-ach, to strengthen the Brain, they apply it to the

Ton *of the* Head, and perfume Night-caps'with if: It is also  
used for cleansing and cicatrizing Wounds. *Emery da Drogues.'*

Its principal Use in Medicine is external, in cold, painful,  
rheumatic, flatulent Affections of the Head, Nerves and Joints,  
Palsies, Contractions, Relaxations, Contusions, *etc.* It is an  
Ingredient in Pleisters and Cerates for these Purposes. *Rais  
Hist. Plant.* I846. -

There are two Sorts of Gum Anime, the Oriental, and the  
Western.

The Western Anime is the Tear, or white Resin, of a Tree  
that grows in *New Spain.* It is somewhat inclining to the Co-  
lour of. Frankinceofe, [pellucid, white, inclining to a Citron-  
colour] but more oleaginous than Copal. We have it imported  
in Grains like Frankincense, hut they are bigger, and, if  
broken, appear of a yellow Colour like Rosin. It is of a most  
grateful and fragrant Smell;. and, thrown upon het Coat, is  
easily consumed. It differs from the Oriental, in that It.is not  
fo white or lining. The Oriental allo is imported in great  
transparent Lumps; .\* ...

The Oriental is of three Kinds; first, the white; secondly,  
the blackish, which is somewhat like Myrrh, sweet-scented;  
and reckoned, by *Diascarides,* a bad Species of Myrrh. He calls  
it *Minaea,* from the Country where it principally grew. *Serar  
pin* calls it *Aminaea,* which Woul the *Portuguese* corrupted into  
*Acini.* A third Kind is added by *Clusius,* which is the pale,  
resinous, and very dry and scorch’d Sort. All the Kinds exhale  
a grateful Odour in SustinnigaUons.

*. si Sauhine* reckons up five Species of Gum Anime.

I. The Anime of the Colour of yellow Amber. '

2. Whet is like Rosin, being of a White inclining to Yel- ..  
low. . ;

3. The white, pellucid Sort, of the Taste of Vemix, [the  
Gum of the Juniper-tree] and the Smell of Mashch.

4. Whet is of the Colour of Colophony.

5. The white Species, which the *Indians* call *Copal,  
siaii Hist. Plant.* See **BDELLIUM.**

ANIMELLAE. The Glandules seated under the Ears, and  
all along, under the lower Jaw. They arc otherwise called  
*Lacticinia. Castellus* from *Vefallus. ' - -*

ANIMI & ANIMAE DELIQUIUM. See DELtqjriUM,  
**LIPOTHYMtA, and SYNCOPE. ...**

ANIMI PATHEMATA. Affections of the Mind.

ANIMUS, Νᾶς, νέος. βυμὸς, γνώμη, διάνοια. The same a.  
*Meus,* the MIND. It is usually taken, in a shift Sense, for  
that Power and Faculty of the human Soul, whereby it discerns,  
judges, and ratiocinates. .

: As there is a very stridi Connection betwixt the Mind, of  
Soul, and the Body, insomuch that it is impossible, that one  
should he disturbed without injury to the other, the following  
Observations, with refpecl to their Effects upon each other, wist  
not he foreign to a Work of which Medicine is the Subjeci.

A laudable and temperate Blond, duly earned through the  
Vessels of the Brain, imparts Vigour and Strength to the Facul-  
ties of the Soul.

- ’Tis confirmed to us, by daily Experience, that Presence of  
Mind, Moderation of Passions, and even Brightness and Force  
of Genius, in a great measure depend upon the due and mode-  
rate Circulation of a laudable Blood thio’ the Brain; for as foon  
as its Motion begins to grow impetuous, or too much accele-  
rated, fo foon a Propensity to Rashness, and Excels of Passion,  
lays a Foundation for Wrath and Discord: When its Monon  
becomes too quick. Madness is to he dreaded as the Conse-  
quence, as may he observed in Fevers. If the Quantity of the  
Blond is too small, Dread and Tenor enfue, if it moves too  
stowly, a mournful anddejectsd State of Mind is the Result.

The various Inclinations and Propensities of our Minds,  
either to Virtue or Vice, depend very much on the Circulation  
of the Blond thro’ the Head.

This accounts for the Affections of the Mind being in-  
fluenced by the Temperament and Constitution of the Body .  
for we obferve, that the Actions, commonly called *Animal,* are  
regulated, as it were, by the Monon of the Blond. Choleric  
People, whose Blond flows very rapidly, are exceeding prone to  
' Rashness, Ambition, Factions, Seditions, Enmities, and Ha-  
treds. People of sanguine Constitutions, whose Blood slows in  
a gentle, easy Stream, are inclined to Pleasures, Luxury, Ease,  
Lust, and all the other Means of gratifying the Senses: - These  
of phlegmatic Habits, whose Blood flows in a saint and lan-  
guid Maimer, are prone to Sloth, Laziness, Nastiness, Base-  
ness, and a Turn *for* esteeming or valuing nothing. And those  
who have aTinctirre of Melancholy in their Constitutions, and  
whofc Blond moves very flow, are cowardly, jp-ainns, and ob-  
stinate. - -

The Dispositions of our Minds, and the Operations of our  
Souls, receive a disterent Turn, and ate varioufly modified, not  
only by the Quality and Motion, het also hy the Quantity of out  
Blood.

As there is a wide Difference hetwhit the Quantity and Ef-  
fects of that Degree of Motion wherewith a small Body, and

that whereby one larger, is moved; so likewise, 'in the'Animal  
(Economy, a certain Degree of Force is impress'd on the Mind  
by the Circulation of a large Quantity os Blood, and a propor-  
Iionably less, by the Circulation of a small Quantity of Blood.  
Thus we observe, that if a choleric Man abounds in Bleed, all  
the Operations of his Mind are Vchement; hot, and impetuous;  
by which means his Vigour of Mind, his Courage, his Solidity,  
Ins Constancy, and his vchement and indefatigable inclination  
so bring about his own Measures, are augmented; all which  
are proportionably impair’d and lessen'd, by diminishing the  
Quantity of the Blood, in melancholic Constitutions, if a  
large Quantity os thick Blond is carried thro' the Membranes  
of the Brain; and them minutest Veffeis, a great Steadiness or  
Composure os Ideas, sure and lasting Impressions of Objects,  
and uncommon .Constancy and Resolution in acting, are the  
Result. .When Persons of sanguine Constitutions abound in  
Flood, they are voluptuous, lustful, and fierce; but if a scanty  
PortionOf Blood flows in their Veins, they becsane cowardly,  
fluctuating, and inconstant.

*. As* a large Quantity of thick Blood contributes to Strength  
of Body and Fortitude, so a small Quantity of thin Bleed lays  
a Foundation for Cowardice, and is, as it were, the Instrument  
of a quick and lively Sensatiori.

The Sentiments of *Aristotle,* upon this Point, are excellent,  
when *[Lib.* 2. *De Partibus, Cap.* 4] he talks in this Strain:  
\* ‘ Those Animals whose Blood abounds with many thick Fi-  
" bres, are held and furious; for all solid Bedies, when heated,  
" convey a strong Degree of Heat: Hence it is, that Bulk  
" and Boars are courageous, wrathful and fierce; for their  
" Blood is replenish'd with Fibres." The same Venerable  
Author asserts, [ *Lib.* 2. *De Partibus Animalium, Cop.* 2. J  
" That a thick het Blood contributes to Strength, but not to  
" Understanding; and that a thin Blood is better calculated for  
" the several Purposes os Sensation and Understanding."

Thus the Circulation os the Blond not only unites the Soul  
with the Body, but also governs and directs its Operations.

So long aS the Circulation of the Blood din duly carried on,  
the Vital and animal Functions are regularly and exactly per-  
formed ; or, in other Words, the Man perceives, sees, hears,  
thinks, and reasons:. But as soon as the Circulation of the  
Blood is impaired, diminished, or quite stopp’d, so soon his  
Senses, and his Memory, the Force os his Imagination, and the  
Faculty os his Reason, are proportionably diminish'd, impair'd,  
or lost. Whoever is desirous, therefore, that his Soul and Body  
should long maintain their darling Union, and carry on their  
mutual intercourse; or that his Soul should perform her Ope-  
rations with ease. Delight, and Freedom; ought to hend all  
his Thoughts, and direct his principal Care, to this one Point,  
the preserving sound and ensue the Circulation of the Blood,  
and those Vital Motions, which, aS it were, influence and go-  
vern it; which End is most effectually obtained by a proper Re-  
gimen, with regard to the Non-naturals. Whoever also is fond  
*of* that happy State, which is the genuine Result os a sound  
Mind in a healthy Body, must he at due Pains to preserve the  
Circulation of his Blood temperate, or in a due Medium ; for  
just and excellent is that Observation of *Hippocrates, [Lib. de  
Flatibus]* where he talks in this Strain: " I am os Opinion,  
" that nothing in the whole Body is more conducive to Wis-  
dorn than the Blood; therefore, so long aS it remains in a  
" good and natural State, Wisdom and Prudence are not want-  
" ing; but when the State of it is changed. Prudence shares  
" its Fate, and Vanishes. This is Very observable in Persons  
" that are drunk, where, by the sudden increase of the Blood,  
" the Mind itself, and its Prudence, receive, aS it were, a sud-  
" den Shock; and they become insensible of present evils, and  
" bless themselves in the flattering and delusive Prospect of  
" future Good.” There is a Very remarkable Passage, to this  
.Purpose, in a certain Letter which *Democritus* wrote to *Hippo-  
crates,,* where he says, " That the Understanding is increased  
" by the Presence of Bleed, of which those who think aright  
are bless'd with Store; but when the Body is diseased, and  
" the Mind void of sufficient Force to think on Virtue, the  
" Disease darkens the Mind herself, and draws her Prudence  
" into Consent.'' *Hoffman's Medicin. Rational. Sastemat.'  
Vol.* I. . .

There is *so* noble and sublime an Harmony and Consent be-  
tween the (Economy of the vital and animal Motions, that the  
least Defect in the Circulation of the Blood, forthwith produces  
a proportionable Alteration in the animal Functions; as, on the  
other hand, a depraved Imagination not Only influences, but  
even Vitiates and spoils, the Functions of the whole Body.

This Truth might he illustrated and confirm'd by numberless  
Instances; a few of which will well enough answer my pre-  
sent Purpose. Whenever the Motion of the Heart ceases, the  
Mind forthwith forbears to exert her several Operations, and all  
Reflection and Thought are at an End with her. A due Cir-  
culation of the Bleed thro' the Brain maintains the Powers of  
the Seal, and the Force of the Genius, in rhisir native Splendor  
and Vigour ; but as soon aS this due Circulation is disturbed or  
changed, either by a Diminution or an Acceleration of Motion,

the Mind is’ forthwith disposed to inordinate Affectioris, and  
Deviations from the Laws of Reason: Hence it is, that the  
Dispositions and Propensions of the Mind depend upon the  
Temperament of the Body, or the due Circulation of the Blood  
thro' the Brain. The drinking Wine, or taking any other Sub-  
stance, which can impart a brish and lively Motion to the Blood,  
uses generally to brighten the Genins, and advance the Wit  
above its common Standard. Medicines which, by their un-  
grateful Stearns, contaminate the Juices, such as Narcotics,  
impair and sometimes quite destroy, the Reason, the Memory,  
the Genius, and all the Senses. How great the Influence of a de-  
frayed and ill-governed Fancy is, inchanging the Motions os the

‘arts, may be proved from the Vehement Passions of the Mind,  
the obstinate Fancies of melancholy People, and all the dis-  
quieting and uneasy Train of unreasonable and ill-grounded De-  
sires and Aversions. *Hoffman. Medicin. Rational. Systemnt.  
Vol.* I.

The Passions and Affections of the Mind plainly prove, that  
the nervous Fluid, when ill-disposed, or put into a preternatural  
Commotion, induces a Change upon the Tone, the Elasticity,  
and the Strength of the Parts.

Thus we observe, that Fear or Terror contract and compress  
the external Parts so strongly, that the Blond is forced from the  
Circumference to the large internal Vessels about the Heart and  
Lungs; which fufficientiy accounts for the Palpitation of the  
Heart, the Uneasiness in the Bowels, and the Cold in the ex-  
treme Parts, which are found in People upon such Occasions,  
By Sadness the Influx of the nervous Fluid is considerably inter-  
cepted ; hence almost all the Parts of the Body lose their Tone  
and Strength, and a great Disposition to chronical Disorders  
ensues. Besides, Disorders, that are otherwife benign and ven.  
tie, easily acquire a dangerous Malignity, by reason of the Loss  
of Strength. The Passion of Anger, by putting the nervous  
Fluid into a Violent Commotion, occasions a strong Stricture in  
all the nervous System: Hence the Pulse and Breathing become  
quick, the natural Heat is increased, and Men are at that time  
possess'd of most Strength and. Vigour. *Hoffman. Medicin.  
Rational. System. Vol.* I.

Since the Blood and its Motion have, by means of the Fluid  
of the Brain, such an Influence on the Operations of the sensi-  
tive Soul, it must of course follow, that all such Things aS are  
possess'd of a Power of altering the Quality or Motion of the  
Blood, must have a proportionable influence on the Mind.

We are not therefore to he surprised, if particular Climates,  
Regimens, or Medicines, are capable of inducing a Change in  
our Minds, Dispositions, and Understandings; for *Hippocrates*has Very justly maintained, *[Lib.* I. *de Dial.]* that the Mind  
may he improved and rendered wiser by Diet; and in the same  
Book he asserts, that is *the Body be found, ana free from Dif-  
fuses, the Frame and State of the Mend mast, in Consequence os.  
that, be blesud with JVifdom* ; and that; the Temperament of  
the Bleed conduces much to Wisdom, is likewise asserted by  
the same Author. Besides, Experience teaches us, that, among  
the People of different Climates, some are acute, others dull;  
some excel their Neighbours in Force of Genius, and Reach of  
Thought; and others are addicted to Various Vices, almost un-  
known to People of other Climates. It is also confirmed by  
Experience, that rich and generous Wine renders Men chear-  
ful and witty; whereas flatulent Substances, such as Peas and  
Beans, and also foetid Substances, such as Opium, and Hen-  
bane-seeds, render Men dull and mad ; and 'tis well known to  
every Physician of Skifl or experience, that ardent Fevers pro-, \*  
duce Deliriums, and the Flatulencies of hypochondriac Persons  
Melancholy, and eVen Madness. *Hoffman. Medic. Rational.  
System. Fol.* I.

The Power of Fancy exerts itself also Very strongly in chang-  
ing the natural Actions. How pernicious to the Foetus the san-  
tastical, sudden, and strong Impressions of Women with Child  
are, especially when accompanied, with any Degree *of Fear, is*fufficientiy proved from the Deformity of the Parts, the Marks  
and Spots left upon then Bedies; and how destructive of Health  
all Vehement Desires are, is abundantiy shewn from the Effects  
of a furious and distracted Love, the Longings of Women during  
Gestation, and the intense Desire of seeing one's native Coan-  
try, and Relations. The Loathings, excited either by the  
Smell or Sight of ungrateful and disagreeable Substances, so  
disorder the Stomach, as to produce painful and uneasy Vomit-  
ings. Daily Experience shews us, what Violent Commotions  
are raised through the whele Body by the innate Aversion m  
Cheese, Cots, effusion of. Blood, or other disagreeable Objects.  
Profound Meditation, and strong Application of Mind, weaken  
the whole Body, and the Stomach itself We likewise observe,'  
that they so contract, or sometimes relax, the Membranes of the  
Brain, as to prove the fruitful Sources of some Very terrible  
Disorders of the Head. Accounts of Physicians, every-where  
to he met with, inform us, that on the bare Sight of epileptic  
People, or such as have the Small-pox, many have fallen into  
these Very Distempers. Nothing is more certaim than that some  
People, from the Very Dread of the Plague, have been seiz’d  
with it, even the' it did not rage in the Country where they

.lined; and -Experience has several times convinced us, 'that  
- seme have been purged, vomited, sweated, and even salivated,  
by pure Force os Imagination. These Accidents principally  
happen to delicate Constitutions, or such as have been previous-  
ly weaken’d and enervated by the Shocks os some Distemper,  
or by some otherCRufe.

Hence it follows, that the more disengaged and calm the  
State os the Mind is, the less it disturbs and injures the Motions  
of the Body, the Operation os Medicines, and the salutary  
Effects os Aliments; and, for this Very. Reason, the Philoso-  
i phers of all Ages, and all Countries, have, with one Voice,  
recommended Tranquillity os Mind, as the best and most effe-  
ctual Means of lengthening our Lise, and preserving the Con-  
Pitution found and Vigorous. *Hs.sm.tn. Medicin. Rational.  
Syflemat. Fol.* IV

The Female Sex, as daily Experience shews us, suffer gene-  
rally very much by the menstrual Discljarge bring either disturb’d  
or obstructed ; butonjoy a good State os Health when this use-  
ful and necessary evacuation is duly and regularly carried on.

For this Reason a Physician ought to make it his principal  
Care to promote this Discharge in sufficient Quantities, and at  
due and proper Seasons: But nothing is more satai to the due  
’ Excretion of this Recrement than violent Commotions os Mind,  
and more especially an Excess of Dread and Terror, the In-  
fluence of which is often powerful enough to put an immediate  
Step to the Discharge, when going on in a natural, undisturb'd,  
and easy Manner. *Hoffman. Medicin. Ration. Syflemat. Pol.* I.

AS a further Confirmation of the general Doctrine here laid  
down by *Hessenan,* I cannot help mentioning the real, tho'  
scarce credible. Case of a young Lady, " who, from her na-  
" tural Turn, or the Strictness of her education, had become  
a remarkable *Devotee.* Her Disease, for such it was, at last  
" degenerated into that most fatal of all Calamities, *a religious  
' " Melancholy.* Her false Apprehensions of the Supreme being,  
" and the Measures os his Administration, filled her Mind with  
" all the black and ghastly Ideas of Gloom and Terror: Upon  
" this, such a Suppression os her Menses ensued, as would yield  
’" to no *Emrnenagogue,* eVen the most efficacious and best chosen.

" This unlucky Circumstance was attended with fuch fatal  
'" Consequences to her Health, that Lise itself became a Bur-

" den, rather than a Blessing. During this disconsolate and  
" deplorable State, she happilv got acquainted with a Clergy.  
" man of a free and rational Turn of Thought, who, partly  
" by the Graces of his Person, which sometimes are Very ef-  
" fectual in convincing, and partiy by the Strength os his Ar-  
" guments, banish'd her religions Horrors, convinced her of  
" the amiable Character of her Maker, reconciled her to Lise,  
" and reduced her clouded Mind to an. easy and comfortable  
\*" State : Upon this her Menses began to flow regularly, and  
" in a due Quantity ; she resumed her fresh Complexion, and  
" her former Sprightiiness returned. Her Regimen and Diet,  
" in the mean time, were the same in both these so opposite  
" States. But aS the Diseases of the Mind, aS well as those  
" os the Body, are apt to recur on certain Occasions, so this  
" Lady had a Relapse; her former State of Mind return'd,  
" and brought along with it the same Disorder, with all its  
" concomitant Train of Symptoms: She got cured a second  
" time, by Means of the same Nature; upon which her  
" Menses, together with her Health, return'd. In short, her  
" Lise, for some Years, was a Scene diversify'd With Various  
" Intervals of Superstition, and rational Religion : When she  
" was under the direful Influences of the former, her Menses

were obstructed, and her Health sensibly impair’d , but when  
under the henign Influences of the latter, her Menses stow'd  
" regularly, and the State of her Health was good."

This, in my Opinion, is an Argument hitherto not insisted  
.on, why young Ladies should he taught early to divest them-  
selves of those unreasonable Fears, and gloomy Prejudices,  
which those who have the Care of their Education in their ten-  
der Years too frequentiy instil inm them; for whet is the Case  
with one of the Sex, may possibly be so with another. By this  
I do not mean to encourage that indecent and impolite Scoff-  
ing at Things sacred, which has of late become too fashionable  
among the gayer Part of the World; but only to strip the Mind  
of those dark and narrow Notions, winch represent God and  
Religion in a gloomy and disadvantageous Point os Light.  
The Physicians of the Platonic Sect were so sensible os the hep-  
py Influences eVen of natural Religion upon Health, that they  
Used only a sew simple Remedies, and ply’d then Patients with  
moral Precepts, and Arguments against Bigotry and Supersti-  
tion, Enthusiasm, and ill-founded Horrors os the religious  
Kind.

This is so fingular a Case, that I could not forbear inserting  
it as a Confirmation of *Hassemaofs* Sentiments, with regard to  
the Influence of the Passions on the menstrual Evacuations of  
Women. The Account is Part of a Letter from a Gentieman,  
who has both Knowledge enough to represent the Case as it real-  
ly was, and Candour enough to say nothing but what he knows  
to he true.

The following Case will sarther illustrate the Effects cs the  
Mind upon the Body:

A Mi-sdinn, v/ho was a Coenoiffeur in his Art. and samed  
for his Compositions, was seiz’d with a Fever, which, gradually  
augmenting, became at last of the continued Kind, and was  
accompanied with terrible Paroxysms. On the seventh Dav lie  
fell into a very Violent and almost uninterrupted -Delirium, ac-  
companied with Shrieks, Tears, Horrors, and a perpetual Want  
of Sleep. On the third Day of his Delirium .one os those na-  
tural Instincts, which are commonly said to prompt Animals,  
when in Distress, to seek for those Herbs that are proper for  
their Case, made him desire to hear a small Concert in his  
Chamber. His Physician did not consent to the Proposal with-  
out some Reluctance. The thing, however, bring agreed to,  
the *Cantatas* of Mt. *Bernier* were sung to him : No sooner had  
the soft melodious Strain touched him, than his Countenance  
-assumed an Air of Sweetness and Serenity, his Eyes became .  
calm, ins Convulsions ceased entirely, he fried Tears os Joy-,  
and was more affected with that particular Music than ever he  
had been with any before his Disorder, or has been with any he  
has heard since his Cure. He was free from the Fever whilst the  
Concert lasted, but, when it was at an End, relapsed into his  
former State. The Use of a Remedy, whose Success had been  
at once so happy and unexpected, was continued ; the Fever  
and Delirium were always suspended during the Concert; and  
Music was become so necessary to the Patient, that in the  
Night-time he made a Relation of his own, who sometimes ar-  
tended him, sing, and even dance, to him. This Relation, being  
pretty much afflicted, paid him Inch Pieces of Complaisance  
with a Kind of Reluctance. One Night in particular, when  
he had but his Nurse along with him, who could only blunder  
out the harsh and unharm onions Notes of some Country Bal-  
lad, he was obliged to put up with her Music, and even felt  
some Effects from it. A Continuation of the Music for ten  
Days cured him entirely, without .the Assistance of- any other  
Remedy, except once letting Blood from his Ankle, which was  
the second time that Operation had been perform'd on him du-  
ring his Disorder, and which was follow'd with a Very liberal  
Evacuation. Mt. *Dodart* acquaints us with this Case, which  
he says is a genuine one, but does not pretend, that it is to he  
set up as a Medel or Standard in Cases of a like Nature. But  
'tis worth while to observe, how effectually Concerts restored  
the Spirits, by little and littie, to their natural Course in this  
Patient; in whom Music, by a long and protracted Habit, had  
hecome the Very Soul. 'Tis not, however, probable, that a  
Painter should be cured by Viewing the exquisite and masterly  
Touches of his Neighbour Artist in a Piece *of* Painting; since  
Performances in that way are not sound to have the same In-  
fluences'on the Spirits with Music: Neither; indeed, can the  
Productions of any other Art come up to .it in this Particular.  
*Hist, de ll Acad.* I707.

ANINGA-IBA Pisonis *el* Marcgr. *Arbor Brasiliensis aqua.,  
iica, folio Nympbceee, fructu reticulato, pulpa alba hurnida.*

It grows in the Water to the Height os five or six Feet, with  
no more than' one brittle Stem, which is divided by a sort of  
joints, and is of an Ash-colour like the Walnuts ; on its Top  
are large, thick, smooth Leaves, of a chearfnl Green, shaped  
almost like the Leaves of Water-lily, or Sagittalis, [Arrow-  
head] and remarkably conspicuous for their strait main Rib,  
and Fibres that run off transversely from it; each Leaf is sup-  
ported by a juicy Pedicle, above a Foot long; between the  
Leaves shoots forth one large, concave Flower, consisting of a  
single incarnated Leas, of a pale-yellow Colour, with a thick  
yellow Style in the Centre, which is succeeded by a Catkin,  
that grows to be a Fruit, of the Shape, and about the Size, of  
an Ostrich's egg, green, and fall of a white moist Pulp,  
which, maturated and dry'd, becomes of a farinaceous Savour,  
and in a time of Famine is eaten, but is dangerous, is taken to  
Excess; because by its Coldness and Flatulency, like Mulli-  
rooms, it threatens Suffoeation.

The Wood os those that are grown to the Bigness of a Tree  
is used for Various mechanical Purposes ; for the Trunk, bring  
fight, tenacious, and of a corky Substance, is what is most  
used by the Natives, and the Negroes, to make their *frngadae^*which are Rafts consisting or three Pieces of Weed join’d, to-  
gether for the hasty passing of .Rivers ; but the Medicinal Vim  
tue consists in the bulbous Root, as speciry'd below. *Raii Hists  
Plants.*

AN INCA *simpliciicr docta, feu* J. Pisonis;

Grows in the same Place, and to the same Height, aS the for-  
mer. It has also one Stem, but which soon runs out into va-  
rious, thick, soft, and reedy Branches, like the Plantain-tree,  
from every one of winch grows out a very large oblong Leaf,  
conspicuous for its Veins here-and-there interspersed. It has  
only one large white Flower, which produces an extraordinary  
Fruit, first green, then astx-coloured inclining to yellow, of an  
oblong Figure, thick, compact, marked over with a sort of  
Grains and Point.. Tne Natives eat it for want of better Ali-  
meet. \_ . . - . . . ...

Poth Animas have a think, bulbous Root, which is of more  
-Vse in Medicine than the Leaves or Fruit; for bring of fine  
-Parts, and a Deobstruent, iris apply’d th Various Uses by the  
*Portuguese,* and the Natives. It is used in Fomentations against  
Inflations and Obstructions of the Reins and Hypochondria.  
The expressed Oil is accounted excellent in the same Disorders,  
.-and supplies the want of Oil of Water-lily, or of Copers. A  
shot Batlr, made -of the Decoction of the Root In Urine, and  
.several times renewed, affords the highest Relief under the  
Gout, whether recent or inveterate. *Rail Hist.*

ANINGAPERI. *Pison.*

A shrubby Plant, which grows plentifully m: the thick  
Woods, and bears a small whitish Flower, which is succeeded  
thy a few Grapes resembling Elder-berries, but of an azure Co-  
lour, inclining to black. The Leaves are downy, of an oval  
Tigure, os a sad green Colour, but Very pleasing to the Sight,  
.soft to the Touch, feeling like-Dead-nettle, and distinguish'd  
thy numerous and think Fibres.

The fresh Leaves bruised, or pulverized, cure -both recent  
.and inveterate Ulcers by the first Intention. *RAii Hist. Plant.*

ANISCALPTOR, from Anus, the Breech, and *Scalpo,* to  
sseratch; that Very broad Muscle, which, with its Fellow, covers  
- almost the whole Back ; so call’d, because it is in Use when that  
Office is perform’d. See-LATISsiMUS DORSI.

ANlSOS, Ἄνισος, from α Neg. and ῖσος, equal ; unequal.

ANlSOSTHENES, ’Ανισορίενῆς, from α Neg. τσος, equal,  
.and σθίνος. Strength; unequal in Strength.

ANISOTACHYS, Ἀνισόταχάστ, from α Neg. τινος, equal,  
-and ταχὓς, swift ; unequal in Celerity, an Epithet of the  
Pulse. \_ -

ANISUM, a Plant thus distinguish’d :

*Anisum,* Ossic. Ger. 880. emac. 1035. Park. Theat. 91Γ.

-Ran Hist. i. 450. *Anifum'velocibus, J. B.* 3. *02. Anisian  
vel floesum.* Chain 396. *Anisum Herbariis,* C. B. Pin. 159.

*1 Anisum vulgare.* Mor. Umb. 25. Buxb. 2I. *Anisum officina-  
rum,* Rupp. Flor. .Jen. 229. *Anisum vulgatius minus annuum.*Hist. Oxon. 3. 297. *Apium Anisum dictum, semine suave olente,*Tonm. Inst. .305. Boerh. Ind. A 59. ' ANISE. *Dale.*

Anise, in general, is of a heating and drying Quality,  
makes the Breath sweet, is an Anodyne, Diaphoretic, Di-  
uretic, and Discutient. Being drank, it restrains Thirst in a  
Dropsy, is good against the Poisons of Venomous Creatures,  
and Inflations; fits stops a Looseness, and the Fluor albus;  
draws Milk to the .Breasts, and stimulates to Venery. The  
Fume received up the NostrilS eases the Pain of the Head. The  
powder, mixed with Oil of .Roses, and instilled, cures Rup-  
Tures in the Ears.

. The best Seed is what is fresh, still, free from Mouldiness,  
and has a Very strong Smell The Anise of *Creta* is accounted

. the best os the Kind ; and next to that the *Egyptian. Diofco-.  
rides. Lib.* 3. *Cap.* 65.

- i Anise, drank in Wine, is good against the Venom of Scot-  
pions. It is one. of those Simples which are most highly com-  
mended by *Pythagoras,* whether raw, or in Decoction. Green  
or dry it is an usual Ingredient in all Pickles and Sauces, and is  
put in the lower Crusta of Loaves, and in medicated Bags. It  
is used with bitter Almonds to add a Bristness to Wine. Eaten  
in the Morning with Alexanders and a little Honey, and washed  
down with a Draught of Wine, it takes off a stinking Breath,  
and makes the Countenance youthful. Put in a Pillow, so  
that it may be smelled, it relieves a Person under want of Sleep.  
It gives an Appetite to Food; for Luxury, among other InVen-  
fions, has found out a Method to render Labour unnecessary  
for procuring a good Stomach. For these Virtues some have  
called it *Anicetum* [insuperable]. It serves instead of Ligusticum  
[Lovage] in Pickles. *Jollas* applies its Root bruised in Wine  
to sore Eyes afflicted with Rheums: He also uses Anise bruised  
with Wine and Saffron, or bruised alone, and made into a Pul-  
tis, for great. Defluxions on the Eyes, or to extract any thing  
that may have fallen into them. Used with Water, it con-  
sumes the Polypus in the Nose ; mixed with Honey and Hys-  
sop, and gargarined with Vinegar, it asswages the Qpinsey;  
being roasted, it. expectorates Phlegm, and the more effectually,  
If it be mixed with Honey ; with half a quarter of a Pint of  
Anise bruise fifty bitter Almonds cleansed in Honey, for a  
Cough. A Very easy Prescription is, to

Take three Drams seven Grains os Anise, and two Drams  
five Grains of Poppy; mix them with Honey to the Size  
of a Bean, and take one for three Days together.

It is particularly serviceable in Eructations, and therefore  
cures Inflations ot the Stomach, the Gripes, and the Colic.  
Being smelled to, or the Decoction of it drank, it represses the  
Hiccups. A Decoction. *of* the Leaves digesta Crudities; the  
Smell of the Decoction, with Smallage, stops Sneezing; being  
drank, it procures Sleep, represses Vomiting, and Tumors ol  
the Praecordia, and is Very useful in Disorders of the Breast and  
Nerves : There is nothing thought more friendly to the Bellj

and Intestines; wherefore it is given roasted in the Dysentery  
and Tenesmus: Some add Opium, and prescrihe three Pills of  
it in a Day, of the Size of a Lupine, diluted in a Glass os  
Wine. *Dieuches* gave the Juice os it for Pains in the Loins j  
and the Seed, bruised with Mint in Wine, to Persons assiictod  
with the Dropsy or Colic; and the Root in Diseases of the  
Kidneys. *Dalian,* the Botanist, apply’d a Cataplasm of this  
Heth and Smallage to Women in Labour, and for Pains in the  
Pudenda; and order'd it also to he drank with Dill in the  
Time of their Labour. In a Phrensy they rub the Patient with'  
the green Herb and Polenta, and treat Insants under an Epi-  
lepsy orConvulsionS after the same manner. *Pythagoras* affirms  
tit impossible for one to he seined with 4 Fit of the Epilepsy,  
while this Herb is held in the Hand ; that therefore it ought to  
he Very much cultivated in the Gardens of such aS are liable  
to this Distemper; and that the Smell of it facilitates the Birth;  
and advises, that the Woman should drink it mix'd with Po:.  
lenta, immediately after Delivery. *Sosimenes* used it with Vine-  
gar for all Hardnesses, and also for Lassitudes; for which last  
Purpose he boiled it in Ost, and added Nitre. The Seed, drank,  
infallibly relieves the Traveller under Lassitude. *Heraclides*prescrib'd as much of the Seed as may he taken up with the  
Thumb and two Fingers, and eighteen Grains of Castor,  
to he taken in Mulsum, for Inflations of the Stomach. In the  
same manner is it given in Inflations os the Belly and Intestines.  
For the Orthopnoea (a kind of Asthma) the same Quantity of  
Seed is given, with as much Seed of Henbane, in Ass's Milk.  
Many will advise half a quarter of a Pint of its Seed, with ten  
Bay-leaves bruised in Water, to be taken at Supper, by those  
who are inclin'd to Vomit; eaten, and anointed warm, or  
drank with Castor in Oxy m el, it appeaseth the Strangulation os  
the Uterus. Taken with the Seed of CowcumberS and Lin-  
seed, each as much as may he grasped with three Fingers in a  
quarter of a Pint of Wlnte-wine, it cures the Vertigo that  
comes.after Childbirth. *Tlepolernus* used the same Measure os  
the Seed, with the like of Fennel-seed, in Vinegar and a  
Glass of Honey, for a Quartans It eases the Pains of the  
Gout, if the Place be anointed with it, and bitter Almonds.  
Taken in Wine, it gentiy promotes Sweat; it also preserves  
Garments from the Moths. \*

The newest and blackest is the best. It is not proper for the  
Stomach, except in case of Inflations. ‘ *Pliny, L.* 20. *C. ly.*

It is a small tender Plant, producing one Stalk, seldom arising  
above two Feet high, whose lower Leaves are whole, round,  
and indented about the edges; but those which grow upon the  
Stalk, are winged, and finely divided, of a pale green Colour ;  
the Top is branch'd into several Umbels of small white  
Flowers, which are succeeded by round longish Seeds, swel-  
ling toward the Bottom, and ending in a bluntish Point os a  
greenish Colour,. which are of a pleasant Smell, and of an het  
but VeryTweet Taste It flowers and seeds in *July,* the Root’  
dying every Year, after it has yielded Seed. It is cultivated  
*in Germany*; but the best Seed, which is a smaller Sort, comes  
from *Spain.* The Seed only is used, being one of the four  
greater hot Seeds..

*Aniseed* is Carminative, expelling Wind out of the Stomach  
and Bowels, both given at the Mouth, and in Clysters. It is  
frequentiy put into Childrens Victuals, for the Gripes and  
Wind. It is Very useful against cold Affections of the Lungs,  
Difficulty of Breathing, and *Asthma.* Some commend it much  
to be taken frequently by Nurses to increase their Milk. It is  
often used as a Corrector of the stronger purgative Medicines.  
The Oil, distill'd from the Seed, is used for the fame Purposes,  
and often applied outwardly in *Carminative* and *Anodyne* Lini-.  
ments, and particularly for the Pleurisy, and other Pains in the  
Side.

’ Officinal Preparations are only the Chymical Oil distill’d  
from the Seed. *Millers, Pot. Off.*

The Moderns have added nothing to the Virtues fpecisy'd  
by the Antients, except that it is a Corrector os Scammony.

For the Method of making Oil of Anise, see **OLEUM.  
ANISUM CHINAE. See ZINGI.**

ANISATUM, an artificial Wine, prepared of ten Pints of  
Honey, thirty Pints of Wine os *Afcalen,* (a maritime City of  
*Syria)* and five Ounces of Aniseeds. *Oribas. Med. ColL  
Lib. ζ. Cap.* 33. ..

' ANNETESTES. The *Galenists* so call'd by *Paracelsus,  
Frag, de Morb. Gall,* by way of Derision, aS ignorant and  
blind with respect to the Principles and Causes of things^ .  
*Castellus.*

ANNORA, calcin'd Egg-shells, or Quick-lime. *Rid.* and  
feW.

ANNOTATIO, the Very Beginning of a febrile Paroxysm,  
when the Patients use to shiver, to be refrigerated, to yawn,  
stretch, and be drowsy, *etc. Gal. L. Aph.* I. It is also cedlegi  
ἐνπσημασια, and εῖσβολἤ παροξυσμῆ, the Attack os the Pa-  
roxysm.

There is another *Annotatio* or *Epis.emasia,* which is proper th  
Hectic Fevers, and happens when the Patient, an Hoar or two

after easing, feels an Increase of Heat, with a swifter and fuller  
Pulse than before, but without a Shivering, Refrigeration, or  
any os the sorementioned Symptoms. Hence it is called by  
*'Gal. Lib. de Discs. Feb. Cap.* 9. όττσημασία ἄθλλττος, an in-  
oppressive *Annotatio, Castellus.*

ANNUENTES MUSCULI, the same aS *Recti Interni rni'  
' nores,* which see.

ANNUITIO. So *Pliny* cans the Motion of the Head for-  
ward.

ANNULARIS CARTILAGO, the Ring-like Cartilage  
. or Gristle at the Head of the Larynx. See CRIcoiDES.

ANNULARIS DIGITUS, the Ring-finger, or fourth  
Finger of the Hand.

ANNULARIS VENA, the Vein between the Ring-  
finger and the littie Finger, which *Aetius* adVifes to he open'd  
in Affections of the Spleen. *Aetius, Tetrab.* I. *Serm.* 3.  
Cap. I2. .

ANNULUS, Δαάτυλίδιβν, κρίκος. A Ring, *^ucrcetan de  
Med. Hermet.* and from him *Libavius,* mention a purging Ring  
prepared of Glass of Antimony. You find also in *Tralliarr,*and *Marcellus Empiricus,* several superstitious Rings recom-  
mended to be worn as Amulets against the Colic and epilep-  
sy. *Scultetus,* in his *Armament. Chirurg,* gives us the Descrip-  
tions and Figures of several Chirurgi cal Rings; and *Zeccbius de  
Morb. Gallic,* writes, that a Gold Ring held in the Mouth ex-  
tracts Quicksilver out of the Body.

ANNUS, Ἕτος, ἐνιαυτὸς; the Year. The Antients divided  
the Year into *Summer* and *Winter, as Lind. Ex.* II. *Sect.* I96.  
demonstrates out of *Tbeephrastus ;* but those who came after  
them made a new Division of it into four Quarters, by adding  
*Spring* and *Antumn.*

*Annus Philosophicus,* the Philosophical Year, is a common  
. Month. *Don.* and *Ruland.*

*Annus Amadin,* is long Life. *Bern,*

The Seasons of the Year, and their Vicissitudes, are the Oc-  
casion of Various Changes of Diseases,’ aS *Hippocrates* observes ;  
for which Reason their Temperatures and Alterations are to be  
well observed.

*Anni Tempora Constantia,* καθςστεῶτες *xeuati,* consistent Sea-  
sons of the Year, are such aS keep their usual and expected  
Temperature, and’promise none but Diseases of a favourable  
.Kind, and easy to he judged. On the contrary, the *Tempora  
Inconstantia, juugul deaTdadlot, inconsistent* Seasons, are un-  
constant, unstable, and unfit for forming a Judgment. *Hip. Aph.*

*Anni unius Opus,* the Work of one Year, is said os the Phi-  
Iosophers Stone, because it may he brought to Perfection, and  
the whole Process finished, in one Year, heing no more than  
changing Gross into Subtile, and Fixed intoVolatile. *Castellus.*

ANO, Ἄνω, upwards, it is opposed to κάτω, downwards,  
and imports the superior Parts. In *Hippocrates,* and others,  
This Adverb is often join'd with κβιλία, the Belly ; or κοιλία  
. is understood when it implies Vomiting ;. as κάτω join'd with  
it, or understood, implies Purging. Of purgative Medicines  
also some are term'd ἄνω, winch are Emetics, others κάτω,  
which purge downwards.

ANOCNEILON, ’Ανώχκλον, from ἄνω Μκίχεἴλος, aLipt  
The upper Lip, which is opposed to κατώχβλον, the under Lip.  
*Castellus.*

ANODIA, Ἀνοδία, from α Neg. and οδὸς,. a Way. An  
unpaflable Way. Metaphorically it signifies an improper Me-  
thod ess Teaching or Learning; *HippOc.* ἐν π^μγζελ. and is op-  
posed to ἐυβδίη, Euodia, an easy and expeditious Way of ar-  
riving at Knowledge, *Hippoc. Aor ivynplafs*

ANODINA, narcotic Medicines. *Johnson.*

ANODMON, Ἄοδμον, from a Neg. and ὸδμἢ, a Smell.  
Without Smell. Thus ἄνοδμον πῦον in *Hippoc. Coac.* is Pus  
that has no Smell, or at least no soetid Smell. It is the same  
*as Anos.mon, aroapua,* and is opposed to *dysodes,* foetid.

ANODON, Ἄνωδον in *Hippocrates* is expounded by *Ero-  
tian durhsta καὶ otor* ουδὸν, the Threshold and Step of a Door,  
or a Stone at the Threshold of the Door, by which an Entrance  
opens, into the House. The same, he says, is also Called φλια.  
But if this Interpretation of *Erotian* he right, he seems to  
have in View that Passage *Lib. de Art.* where *Hippocrates*orders τῆς κλίνης τὰς ποδας *ἐρηρρίδκ, sorstsc* τὸν ήδόν, the Feet  
of the Bed to he fasten'd to the Threshold of the Door. And  
also another Passage in the same Book, which runs thus :  
Τὸ μἐν τ ήδον ἐρείδοταζ, τὸ 3 *lsocaa το ai&AnSe-*

βλημένος. One os them (the Levers) is fasten'd to the Threshold;  
and the other to a Piece os Word set up sor the Purpose : So  
that *Erotian* seems to have read ἄνωδον sor τ ήδόν. In *Suidas,*ήδὸς signifies βατηρ, φλιὰ καὶ βαθμὸς, and το κάτω δ θιρας,  
the Stone, or wooden Step or Threshold, at the Foot os the  
Door, by which you enter the House. *Iies.ychius,* ήδός βατῆρ o  
πρα τῆς θιἀραι, the Step before the Door : It is also called δδὸίον  
(Odos). *Foejius.*

ANODUS is theChymists Word for what is separated from  
the Nourishment by the Kidneys. *Rul. Johnson.* The *Creel:*Word'ikeodhis, Anodus, stoma Neg. and όδιὴς, a Tooth, sig-  
nifies Toothless.

ANODYN A, ἀνωάυτα, from α Negat, and *dysor,* Rssse.  
Anodynes-

Medicines winch procure Sleep, and Fare from wereby the *Greeks* called *Hypnotic,* and *Anodyne* ; and, if of a  
stronger Nature, *Narcotic,* or stupisying; and ar- st,ch gUha  
stances as by their subtile, nauseous, and disagreeable Exhe’a-  
tions sometimes diminish, and sometimes quite destroy, the Moi  
'tion and Sensation of the solid Parts.

Among the principal of the Hypnotic and Anedyne Media  
Cines, are all the medicinal Preparations os the Poppy, esoe-  
daily Opium, which was by the Antients called the Tears\* of  
the Poppy, or Meconium, and is an Extract of the Poppy pro-  
.cured by boiling. But as for the Narcotic, or stupisying Me-  
dicines,. all those of stronger Qualities may be reckon’d among  
them, such as the Preparatives of Mandrake, Henbane, Night-  
shade, Thern-apple, and Dutroy. *{Datura).*

Narcotics and Anodynes are justly rank'd in the Class os  
Poisons ; for they quickly prove hurtfid when given in a Very  
. small Dose, and kill entirely when exhibited in a littie larger.  
Besides, they exert their Influences, and produce their Effects,  
principally upon the more noble Parts of our Bodies, in which  
the Powers of Sensation and Motion reside.

*Celsius* is of Opinion, that these should never he given with-  
out absolute Necessity, because they are of a violent Nature, -  
. and hurtful to the Stomach. And *Galen* fays of Narcotics,  
that they are called Anodynes aS improperly as a Man who was .  
dead would he said to feel no Pain.

It is recorded of *Sylvius,* that he said he would not practise  
Physic without the Use os Opium ; but notwithstanding this  
S eat Encomium, I am satissy'd, that sor one who receives any  
enefit from Opium, a hundred lose their Lives. As Opium  
and its Preparations seldom sail to induce Ease from Pain, they  
- too often lay a Temptation in the Way of People in the lower  
Class of Physic, to satisfy the Impatience of those they attend,  
tho' at the Expence of Lise ; insomuch that I was once a Wit-  
dess of the Destruction os three People in this Way, by one and  
the same Person, and that in less than six Months : And in  
.such Cases Physicians are usually called in too late to remedy  
the Evil. mi. . '

It must, however, be consefled, that Anodynes are, in some’  
Cases, of great Importance, if administer’d with Prudence and  
Judgment. Thus, if in Miscarriages the Placenta, or any Part  
of it, remains in the Uterus, Anodynes, by relaxing the Parts;  
and removing the Stricture, which is increas’d by Pain\*, make  
room *for* the Expulsion of what is retained. In like manner,  
also. Anodynes are of Service, when a Stone is fixed in one of  
the Ureters, after proper Evacuations. And when a Suppression  
of Urine is caused by a painful Stimulation, and consequent Con-  
traction, of the Sphincter Muscle os the Bladder; Anodynes; by  
removing the Cause, make way for a ready Discharge os Urine.

*Hoffman* is of Opinion, that Sleep and Anedyne Medicines  
?uench Thirst, because they remove the Stricture from the  
stands, and relax the Ducts of the Fauces, by which means a  
more plentiful Affusion of Moisture to them is procur'd.

But by Anodynes, in a more lax Sense, may he understood;  
all Remedies which relieve Pain. Thus a Lancet may, not  
improperly, he said to be an Anodyne, because, by evacuating  
a Part of the Blood, it mitigates inflammatory Pains. Thus all  
relaxing Remedies, Diluters, and Medicines which by any  
means destroy Acrimony, or expel Wind, are, in then Effects,  
Anodynes, when properly apply'd.

- ANODYNIA, Ἀνωδυνία, Indolence, or Absence of Pain;  
*Castellus.*

ANODYNUM minerale; Sal Prunellae. *Castellus.*

ANOEA, \*Αν«α, from α Neg. and νὸος, the Mind ; the  
same as *Amentia,* Madness.

. ANOMALIA, ANOMALUS, ἀνωμαλἰα, ἀνώμαλος; from  
α Neg. and ομαλός, equal, smooth. Irregularity, Inequality,  
unequal, irregular.

An unequal or irregular False is one, that falling higher in  
one Part of the Artery, which swells and dilates itself to a  
greater Degree, than in another Part which is more narrow,  
and, in a manner, contracted, beats with unequal Force, so  
that one Part of the Artery seems to he lifted up with Vigorous,  
the other with weak efforts. *Galen, in Desinit. Med.*

An unequal Pulse is one that gives sometimes a stronger,  
sometimes a weaker Stroke. ’ *Galen, ibid.*

We call that an irregular or unequal Pulse, \_ which consists of  
one, two, three, or more Kinds of Pulses. This Irregularity  
lies sometimes in one Pulse, sometimes in more. We call it  
an Irregularity in one Pulse, when, feeling the Pulse with our  
Fore Fingers, we find a different Pulsation under each Finger.  
Sometimes we seel one kind of Pulse. under two Fingers, and  
another kind under the other two Fingers ; and sometimes one  
kind of Pulse under one Finger, and a different one under the  
other three. *Actuarius, Lib.* I. περὶ δοατνῶσ. παθῶν. *Cap.* I.

Of unequal Pulses, some destroy the Equality in one Pulsa-'  
tion of the Artery, others-in more ; this latter inequality is  
commonly called bv Physicians Systematic *(collectives. Galen  
de Cause Puli'.*

-ANOMOEOMERES, Άνομοιομερἐς. from a Neg. *suaot.*Silts, and μέρος, a Pars. Dissimilar in Substance, or consisting  
-of Parts of a different Kind. *Blancard. .*

It is aho called ἱτεςίγενές, heterogeneous.

ANOMOEOS, Ἀνίμβι^-, dissimilar, or heterogeneous.  
. . The Word is apply’d by *Hippocrates* to preternatural and vrci-  
.-ous Humours generated in the Farts, which, -if they tend up-  
. wards, he advises, by way of Revulsion, to pur?e downwards ;

if downwards, to endeavour their Solution by Revulsion up-  
.-.s.'wards. Foesius. .

ANOMPHALOS, ’Ανίμφαλος, from α Neg. and ἰμφαλὸς,  
-a Navel. Without a Navel, as *xssenAdam and Eve,* being  
. created, -and not nourished by the Umbilical Vessels, as,some  
*-of* the Learned heve been at much fuoerfiuous Pains-to prove.

. r" ANONA. \*;

The Charactsrs are:

-It is a Tree growing to the Height of an Apple-tree; the  
Leaves are sot the most part single and oblongthe Flowers,  
.for the most part, consist of three thick narrow Petals or  
Flowcraleaves, and are produc’d singlesipon their Foot-stalks :  
These Flowers are succeeded by conical, squamous, or.netted  
Fruit, .which have a pulpy Substance surrounding the Celis, in  
which arc contains oblong hard Seeds. s-

. The Species are,

*I. Anond maxima, foliis latis .splendentibus, fructu maximo  
viridi concide, taberculis seu spinulis innocentibus aspero.* Sloan.

Tat. Pl. Jam. THE SOUR-SOP; *vulgi.*

*a. Anona maxima, foliis oblongis angustis, structu maximo  
.luteo concide, astice glabro, in areolas distincto.* Sloan. Cat.  
El. Jam. THE CUSTARD-APPLE, quiqui

3. *Anona foliis oderatis minoribus, fructu concide seuamose  
eporvo dulci.* Sloan. Cat. Pl. jam. THE SWEET-SOP ;

*- . vulgo. . ' -*

*\* 4. Anona aquatica, foliis -laurinis.. atrovirentibus, fructu  
maiore concide luteo, cortice glabro, in areolas distincto.* Sloan,  
l Cat sil. Jam. THE WATER OR SWEET-APPLE ;  
*-vulgi.*

.5. *Apiana foliis s.ubtus forrugineis, fructu rotunde majore  
laevi purpureo, semine nigro, partim rugose, partim' glabro.*Sloan. Cat. Pl. jam. THE STAR-APPLE *., vulgi.*

‘ -6. *Anona - foliis laurinis glabris viridi-suseis, fructu minere*

*‘rotunda viridi-stavo scabro, feminibus suf cis splendentibus,  
jijsara alba notatis.* Sloan. Car. Pl. .Jam. THE SAPPA-  
HILLA OR.NASEBERRY-TREE; *vulgi.*

7. *Acuna .maxima,. - foliis laurinis glabris viridi-suseis,  
.s.ructu minimi rstundo viridi-fiava, feminibus suseis splenden-  
tibus, stseura alba notatis.* Sloan. Cat Ρ1. Jam. THE  
EULLY-TREE; *vulgi. .. .*

\_ These Trees are the Produce of the warmest Parts of the  
*.West-Indies,* as *in'Jamaica, Barba des,* sec. where they are  
cultivated for their Fruits, which are in those Countries in very  
.great Esteem, especially the *Sappadilla,* which they value more  
than any of the other Sorts, and hath been but lately introduc'd  
into some of thefe Iflands. It is very probable, that none of  
thefe Trces were originally Natives of these Countries, but have  
-been transplanted from feme other Parts of the World ; but  
bring there planted, they thrive equally aS well as if it were  
their native Soil, the *Sappadilla* only excepted, which is of a  
tenderer Nature than the others. *Moller's Dictionary.*

; I take the first of thefe to be the **ABATE DE PANUCHo  
RECCHI.**

ANONIS, a Plant thus distinguish’d:

*, Anonis, Ononis, Aresta bcvis,* Offic. Chain I 68. *Anonis  
'sive 'Sofia lumis,* G«. **II4I.** Ernac. I322. *Anonis five Resta  
bovis vulsaris, purpurea et alba, JpincJa,* J. B. 2.391. *Ato-  
ms spinofa, store purpuree,* C. Ρ. Pin. 389. Park. TheaL 994.  
Raii Hist. I, 957. Synop. 3. 332. Tourn. Inst. 408. Elem.  
Bos. 325. Baerh. Ind. Α. 2. 33. Rupp. Flor. Jen. 2I4. Buxb.  
**SI.** *Anonis,* Rivin. Irr. Tetr. Dill. Cat. Giss. I47. *Anonis,  
sue Ononis, Resta bovis, Remorde aratri,* Merc. Bot. **I. I9.**Phy I. Brit. 8. *Anonis purpurea vulgaris spinofa, store purpurea,  
sillquis. erectis lentiformibus.* Hist. Oxon. a. ,I69. REST-  
HARROW. *Dale:*

*Miller* enumerates twenty-six Species of this Plant.

*Anonis,* which some call *Orrinis,* (I read ώνωειδα» according  
*to Theophrastus* and *Galen)* has Branches three Quarters of a  
I1 oot *Or* mor» in Length, shrubby, full of Joints, and running  
cut into many lesser Branches, or Sprays, with round Heads,  
.and.little thin Leaves like those of Lentils, and shaped like the  
Leaves of Rue or Meadow Trefoil, somewhat hairy, scented,  
and nut *of* an unpleasant Smell.

Being gather’d before it produces Prickles, it makes a very  
grateful Pickle. The Branches are thick set with sharp, stiff  
Thorns, like a Palifade.

The Root is heating and attenuating. The Bark hereof,  
drank in Wine, provokes Urine, and breaks the Stone; the  
same absterges Ulcers which are crusted over. The Root helled  
in Oxycras, and the Mouth washed therewith, eases the Tooth-  
nch. *Diasceridcs, Lib.* 3. *Cap.* a I.. -

It is like Fenugreek, only more shrubby and hairy 5 after the  
Spring it shoots forth Prickles. The fresh Herb absterges the  
Margins of Ulcers. The Root is boiled in Posoa for the Pain  
of the Teeth.; and, drank in Wine, expels Stones and Gravel.  
Boiled in Oxymel to one half, it is given-to those who are sob-  
jecti to the Falling Sickness. *, Pliny, Lib.* 2I.. *Cap. 4.*

The Roots of Rest-harrow are very tough and woody,  
of a white Colour, running deep into .the Earth, and sens-  
ing out many shrubby Twigs or Branches, sinootb and ten-  
der at the first springing, but afterwards tough,, and full of  
-long sharp Thoms, one growing at every Setting-on of the  
Leaves, which grow several together at the Joints, each bring  
made of three Parts like Trefoil, and fastened to the Stalk *by*a fiat Appendix: They are small, about half an Inch long,  
andi crenated about the Edges, among thefe, towards the  
Tops of the Branches, grow the Flowers which are papili-  
. onaceous, or like the Flower of a Pea, het less and fiat,- ofa  
reddish-purple Colour, growing in hairy five-pointed *Calyces.*.After thefe are salleo, come small stat Peds, each containing  
two or three small kidney-like Seeds. It grows in waste  
Grounds, and by the Road-sides, and frequently among Corn,  
flowering in *June and July.*

This Root, which is one of the five opening Roots, is the  
Only Part that is used, chiefly the cortical Part, and is a good  
Medicine against the Stoppage of Urine, Gravel, and Stone,  
to cleanse the Reins and Ureters from tough flimy Humours.  
It opens Obstructions of the Liver and Spleen, and helps the  
Jaundice. A Decoction of it in Vinegar and Water, used as a  
Gargle, helps the Tooth-ach from a Desiuxion of Humours.  
*Miller Bot. Oof.*

' ANONTAGIUS, the Philosophers Stone, theGist ofGod,  
the Sulphur fixed by Nature. *Dornaus. .*

ANONYMOS, Ἀνὰνυμος, from a Neg. and όνομα, a  
Name. It was formerly an Epithet of the second Cartilage in  
the Throat, afterwards called CRICorDEs, or ANNULARIS.

'ANoNTMOE is also an Epithet of several Exotic Trees or  
Shrubs; as -

*Anowuios Ilibesii foliis* is a particular kind of Shrubf.with  
Leaves like thofe of Currans, and pentapetalous Flowers, of a  
saint-whitish Colour, and set together on the Extremities of  
the Sprays, in Form of an Umbella, and supported by final!  
oblona Pedicles, the Flower-cup consisting of five Leaves.  
Each Flower is succeeded by two, and sometimes three Seed-  
vessels, or Pods, like those of Comfrey, but void of Seed, in  
Out Gardens, because of the inclemency of the Season. It is  
brought from *Virginia* and *Canada. Raii Hest. Plant.*

ANONYM Us *store Colutea Clusii, Myrto-genesta qullrasclarn.  
Lkamaebuxus jive Charnapyxes quibuselarn,* J. B. *Chamabuxtis  
store Colutea,* Ger. C. B. *Pseude-chameebuxus,* Park. It  
grows in feveral Parts of *Germany. Idem.* ι χ

ANONYMOS *frutex Brastlianus,sure keiri,* Marcgrav.'

Its Bark is ash-coloured ; the Leaves grow alternately oppo-  
site, keel-shaped, indented about the Extremity, of a chearfid  
Green, bright, and elegantly distinguish’d with oblique Fibres;  
the Flowers grow in Spikes at the Extremities of the Boughs ;  
and the Spike, before the Flowers open, is Of a very sine car-  
nation Colour, het then hecornes yellow, as the Flowers are in  
opening, which are pentapetalous, each Petal supported by an  
acuminated pale-coloured Leaf; the Flower contains many  
yellow Stamina, and has a sweet Smell like out Wall-flower.  
*Idem:*

. ANONYMOS *Brajlliand, floribus umbellatis albis hexapetolis. .*AN0NYM0S *baccifera, foliis saliguls, Brastliana,* Marcgrav.  
ANORA. See ANNORA. *Idem.*

ANORCHIDES, Ἀνορχιδες, from α Neg. and υρχις, a  
Testicle. Such as are born without Testicles. - *Castellus.*

ANOREXIA, Ἀνορεξία, from a Neg. and ὸρεξις. Appe-  
tite. Inappetency, a want of Appetite, or Loathing of Food.  
*Paulus, Lib.* 3. *Cap.* 27. ’Ανορεξία οίτίων ἐστιν ἀποστροφη, ητοι  
δυσκρασίας ὑπερεχοὑσης νὰτἀ τὸν στομαχον, η χυμών περίουσίας.  
\_\*\* An Anorexy is an Aversion to Food, occasion’d either' by  
\*\* a Distemperature of the Stomach, or a Redundancy of Hu-  
" mows.” Hence ἀκορεκτα (Anorecti) are called ἀοῆος such  
as will take no Food for want of Appetite. *Galen. Conmi.* r.  
*in Lib.* I. *Epidem. Tails* άνορέάτους καὶ άσίτους «'ομἀξουοιν οἱ  
’Ελληνες τβὑς μὴ προσενεγμένους *uriliei,* τοὑς δ' ἀπεστραμμενουί  
προσίἱώξ καλοῦσνν ἀποσίτουί. " .The *Greeks* call sijch as take no  
" Food *Acarecti* and *Astti*; but such as heve an Aversion to  
i‘ Fond when offer’d, are named ἀπόσίτοι.”

ANORGISMENON, Ἀνωργισμένον, in *Hippocrates, is*explain’d by *Galen in Exec,* by ἀναμεμαλαγμένον, *(anamerna.  
lagrnenrn)* mollify’d afresh. It is from ἀνά, and ἱργίξω, the'  
same as οργἀξω, to . prepare by mollifying, or other means.  
Thus ἀνωργασμένίν, ΟΓ αιωργισμ,ενον *aoifiec,* fiomifies a Body  
mollified -and prepared sor .taking of Medicines. Foesius.

ANOSIA, Ἀνοσία, from α Neg. ami νόσος, a Disease. The  
Absence of a Diseafe. *Castellus.*

- ANOTASIER, Sal Aaunohiac. *Ruland. Jshnse*

ANOTHEN, *\* Aquilum.* an Adveth, as well as *ano,* of Time  
and Place, according to *Galeri,* being significative of the Be-  
ginning of a Difegie, and the upper Parts in the Body. *Foesius.*3" ANSER, a Fowl very well known, and of rm ch Use, of  
which there are two Sorts, the tame, and the wild, ἰ The tame  
Sort in thus distinguish'd:

*Acser,* Offic. Charlt. Exer. Io3. Bellon, des Oyse, I57.  
*Ansar demefiicus,* Sctirod. 5. 3I4. Raii Omith. 338. Ejuso.  
.Svnop. A. 136. Will. Ornish. 273. Aldrov. Omithi 3. I 02.

Gesti. deAvih. I25. Joof. de Avin. 92. Met. Pin. I79. THE  
GOOSE. *Dale.*

The wild Sort is thus distinguish'd i

*- Anserferus,* Ossic.Schrod. 5. 3I4. Aldrov. Omith. 3.147!  
Mer. Pin. I79. Raii Omith. 358. Ejusil. Synop. A. I 36. Wish  
Orhith. 274. Gosii. de Avin. I4O. Jonf. de Avib. 93. Charlt.  
Exer. I03. *De LiOyesatsvage,* Bellon. desOyfe, I 58. THE  
WILDGOOSK *Dale. -*

*Lernery* fays you are to chufe of either of them; that which  
is tender, neither too young not too old, well fed; and that  
bath heen bred in a pure and serene Air.

.' Geese are nourishing enough, and wiry solid and durable  
Fond.

A Goofe is a little hard of Digestion ; and when it is tod  
young, its Flesh is vifcous, and apt to produce gross and excre-  
mentitioris ijomours; whereas, on the contrary, when ’tis too  
old, it is dry, hard, has a bad Juice, and caufes Indigestions  
and Fevers. - \_ . . . .

Goofe contains much Oll, and volatile Salts. The tame  
one allo contains much Phlegm, but tile wild one has not S9  
inuch. .

Both the one and the Other, in Wrnter-thne, agree with  
young bilious People, who have a good Stomach, and are ufed  
to Exercife and Labour. . . ’

/ si ’ R E MER K S. .

Goose is "a Fond that is pleasing enough to the Taste. The  
- wild one tastes better then the tame one ; because that bring

much more upon the Motion than the other, its Flesh is not

; so full of viscous and grofs Juices. -

The Goose fives in cold, moist, and watery Pisces. You meet  
r with this Bird almost in all Countries, they live long, espo-  
- dally the wild Goofe, if we helieve some Authors. *William*

*Grataroius* observes, that they’ll live to he twenty; and  
*- Albertus* fays sixty Years old. The tame Goofe sees but lit-

tle, and rises not far from the Ground; whereas the wild  
one flies high and swift.

**A** Goose lives by Land and Water, as amphibious Animals do:  
But the tame one fives more upon Land than the other. In

. short, wild Geefe are almost always sound in moist and  
marshy Places ; and there are a great many of them in  
*Ethiopia,* which make great Havock in the Country..

It’s observed, that ,a Goose is very vigilant, and steeps so  
slightly, that the least Noise awakes her; and forne People  
pretend, that this Bird is at least as useful as a Dog in the

. . Night, to watch a House, for as soon as it hears any thing;

it ceases not to make a Noife, when the seems to call the  
People of the House to her Relief, of which there is indeed a  
remarkable Example : When the *Gauls* were in the Night  
upon entering the Capital of *Rome, they* gave the Dogs that  
were therein some Victuals, to prevent their barking, which

. had the desired Effect; but nothing of Food that they threw  
hesore the Geefe could hinder their Clamour; which awak'd  
the -Ronreirr. . - - ’

It may he said in general, that the Flesh of a Goose is more  
agreeable th the Taste, then it is wholsome. in short it al-  
ways abounds with heavy and gross Juices, that make it  
hard of Digestion, and therefore in ought to he very mode-  
rately used ; however, ’tis proper enough for robust People  
that have a goad Stomach, because it is nourishing, and a  
durable and solid Fond.

Some pretend to tell us, that Goose-flesh, on which the Jews  
frequently feed, does not a little contributo to make them of  
a melancholy Temper, of a dull, sad, gloomy Humour, and  
of a bad Colour. The antient *Britains* scrupled to eat  
Geefe; but the *Englisp* do it now with Pleasure.

Of all the Parts of a- Goofe, *Galen* approves of none but the  
Liver and Stomach for Fond , however, the Wing is also  
very good. Some pretend, that *Scipio Metellus,* a *Raman*Consul, was the first who ofed Goose-liver ; others afcrihe  
this Honour to *M. Sestius,* a *Raman* Knight.

The Skin of a Goose’s Feet is looked upon to he ashingent,  
and good to flop Bleeding, Or immoderate Fluxes of the  
Meofes, if taken to the Quantity Of bass a Dram inwardly,  
after it has been first reduced to Powder.

Goofe’s Blood is looked upon tn he good against Poison, of  
which two or three Drams are prescribed.

The Fat of a Goofe is ofed in Physic. It is of a dissolving and  
mollifying Nature. It eases the Piles. and Pains in **the**Ears, if put into them. When taken inwardly, it loosens

the Body; and those Parts of, the Body; which are assested  
with the Rheumatism, they rub witlinu . 5

They reduce Goose-dung into a Powder; and half a Drain of  
it is prescribed, in order to rarefy and attenuate the Hu-  
mours 5 to provoke Sweating, Urine, and the Menses ; as  
'also to hasten Delivery. *Lemery on Foods.*

*Dale,* from *Schroder, ~* farther relates, that the Eat of a Goofe is  
good in an Alopecia j and that it cures Fissures in the Lips  
(see AD Epsf; that the Dung dries, incides, and opens to a  
very great Degree; promotes the Discharge of the Secure,  
nines ; :and is excellent in the Jaundice, Dropsy, and  
Scurvy; and that the Cuticle of the Feet is a good Appli-  
tioion to .Chilblains., .. . . - -

The Salts of the wild Goofe must he more highly exalted than  
thofe of the tame Sort, by reason *os* their habitual Exercise;  
and the Food of both Sorts, which consists of Worms,'and’  
other infects, as well as Vegetables, furnishes their Flesh and  
Fat with a highly volatile and penetrating Salt: Hence they  
are sold eft to he very rank - - ..

*ANSERINA.* SeePoTENTILLA.

*f-* ANSJELL See **ANGELINA-**

ANT A CH ATES, Ἀέίαχάτης. Amber, *or* a bituminous  
'Stone of another Colour, which in burning sinelisof Myrrh,  
as *Agricola* writes Of it. *Gorraeus. ....*

ANTACIDA. Such Remedies as resist Or correct-the Aci-  
dity of the Humours..

ANTAGONISTA, ’Ανταγωνιστὴς, from ἀντὶ. against, and  
ἀγωνίξω, to strive. Antagonist, a Word apply’d to sucti  
Mufoles as are contrary to others; for Instance, the Musculus  
Abductis, and the Mufculus Adductur Brachii, are Antago-  
nists. - ’ .

\* ANTALGICUS, Ἀνταλγικὸς, from ἀντὶ, against, and  
ἀλγος, Pain.-. ’Tis apply’d in general to Inch Remedies aS eafe  
Pain. *Castellus. ’ .*

si ANTALIUM, *Jive Antale, Tubulus Marinus. Rondel.*

υ- Is.a little Shell like a Pine, about an inch and an half long,  
of the Bigness of a large Quill at the'thickEnd, and that of a  
little Quill at the other, having little strait hollow Lines,  
reaching from one End to the other, of a white or greenish-  
white Colour. *Tt* is sound upon Rocks, and at the Bottom of  
the Sea. ' It inclofes a final! Sea-worm ; - and contains a little  
fix’d and volatile Salt, with a very little Oil, and a great deal  
Of Earth. . . .

Iris alcaline, resolutive, and desiccative. *Llemcry de Drogues.*

ANTAPHRODISIACOS, Ἀεταφροδιοτακὸς. from ἀντ?,  
against, and Ἀφροδίτη, Venus. Antivenereal, an Epithet of  
such Medicines as extiognish amorous Desires.

ANTAPHRODITfcA, the fame as *Antaphredisiaca.*

ANTAPODOSIES, ἀνταποδοοτες, from ανταποδίδωμι, to  
reciprocate. I think this may properly the translated Returns,  
or Periods, or Vicissitudes of the Paroxysms of Fevers. *Hip-  
pocrates, Apla* ia. *Section* the first, says. That the Paroxysms  
and Forms of a. Distemper are made evident from a Consider-  
ation os the Disease in itself, theSeafons of the Year, and the  
Reciprocations of the Periods, (άνταποδόσιες τῶν περιόδων προς  
ἀλληλας) that is, the Manner of; or Time in which they succeed  
each Other; whether every Day, Or every other Day, Or at  
longer intervals. . ’

ANTARTHRITICUM, Ἀήταρβείμαν, from quii, against,  
and ἀρβείοις, the Gout. ' A Medicine against the Gout.  
*Slancard. .*

ANTASTHMATICA, Ἀὑταί&ματικἀ, from ἀντὶ, against,  
and αόθμα, on Asthma. Remedies against the Asthma.  
*Blancarde*

ANTATROPHON, Άντάτροφον, from ἀντὶ, arid ἀτροφία,  
a Consumption. An Epithet of some Medicines against Con-  
sumptions. ;

ANTECEDENS, Ιϊροηγουμένη, from πρὸ, before, and  
ἡγέομαι, to lead. Preceding, commonly apply’d to Caufe.  
See CAUsA. -

*' Antecedentia Signa,* preceding Signs, are such as are observ’d  
hesore a Difeafe, as a had Disposition of the Blood, which is the  
Caufe of infinite Diseases. Λ

ANTELABIA, Πρύχειλα, from τρο, and χεἰλος, a Lin.  
The Extremities of the Lips.

- ANTEMBALLOMENOS, Άἰτεμβαλλομενος, from ῆςτἰ,  
instead of, and έμβἀλλω, to contribute. Substituted, spoken  
of such Medicines as may be substituted in the room of others.  
They are allo called *succedanea,* fucpedaneous. *Castellus.*

ANTEMBASIS, Ἀντέμβαοτς, from ἀντί, mutually, and  
έμβαίνω, to enter. A mutual Insertion, Or Ingrefs, apply'd by  
*Galen* to the Bones.

. -ANTEMETICA, Ἀντεμοτικἀ, from ἀείτἰ, against, and  
ἐμἐτικὴς, vomitory. Remedies against preaemarural Vomiting.

ANTENDEIXIS, Ἀιτένδειξις, from *ἀντι,* against, and  
ενδείκνυμι, to indicato. Α Contra-indication; as when any  
thing happens in a Distemper contrary to the primary Indication,  
as, for Instance, an inflammatory Pleurisy indicates Phlebo-  
tomy, but the Weakness of the Patient indicates the contrarv.

- ANTENEASMUS, 'or ANTENEASMUM, 2. particular  
Kind of *Mania,* or Madness, when the Patients are furiously  
irritated, and endeavour to lay violent Hands on themi  
selves.

ANTEPHIALTICIIS, ’Αάτεφιαλτικὸς, from ἀντὶ, and έφι-  
*asojns,* the Incubus, or Night-mare: An Epithet Of Remedies  
adapted to the said Disorder.

ANTEPILEPTICA, Ἀντἱπιληπτικα. from *arts,* against,  
and επίληψις, the Epileply. Remedies against the Epilepsy,  
and convulsive Disorders.

ANTEPRIMA MATERIA, in *Paracelsus, Chirurg. Mag.  
Lip.* 3. *Cap. si.* is a Name for that Tinctifre, which has a  
Power of tinctiiring and altering the *Prima Materia* (first Mat-  
ter) of the Body, agreeably with, or contrary to Nature. Ca-  
*stellus.*

ANTER Α. See ANTHERA.

ANTEREISIS, Ἀντέρβσις, from ἀντὶ, and ἐρείδω, to prop  
Or sustain. The Renitency, or Resistance, which a firm and  
bard Body makes against an impression, in this Sense the Word  
is used with refped to-the Bones of the Ribs by *Hippocrates,  
Lib. de Artior ...*

. ANTERIT, Mercury. *Ruland. Jcbnsen.*

ANTEROS, 'Λντέρως, the Stone properly called AMR-  
TnYSTUS, which fee. *Gcrraus. .;*

' ANTHEDON, the Name of a Tree in *Theophrastus,* which  
*Bay* takes for the *Mespilus Arenia.* See MEsFILUS.

ANTHELIX, Ἀνβέλιξ, from ἀντὶ, and ελιξ, the Helix.  
Tire inward Protuberance of the external Ear, within the HE-  
l.rx, which see.

ANTHELMINTHICA, Άνένλμινοἱκἀ, from ἀντὶ, and  
έλμινς, a Worm. Remedies against Worms.

ANTHEMIS. **SeeCHAMAMELvM.**

- ANTHERA, ’Αεύσρα, from ἄνθος, a. Flower. A com-  
pound Medicine, so called from its florid and very red Colour.

. Of this there are various Compositions. The following are .  
from *Celsas,* which he prescribes for incrustated Ulcers in the  
Mouth;

. Take of Juncus Quadratos, (roand-rooted Cypems, accord-  
ing to *Parkinseny* Myrrh, Sandarach, Alum, each an  
equal Quantity: Or,

Take Saffron, Mynh, each twGDrams five Grains; Orris,  
Plumous Alum, Sandarach, each four Drams ten Grains;  
Juncus Quadratus, eight Drams twenty Grains: Or,

Galls, Myrch, each two Drams five Grains j Plumous Alum,  
two Drams five Grains; Rofe-leaves, four Drams twelve  
Grains. Some, he says, take

Saffron, Plumous Alum, Mynh, each one Dram two Grains  
and an half; Sandarach, two Drams five Grains; Juncus  
Quadratus, four Drams twelve Grains.' The three former  
Compositions are pulverized, and sprinkled on the Parts  
asseaed; but this last is made into a Litus with Honey.  
*Celsas, Lib.* **6. Cap. it.**

An *Anthera* for incrustated Ulcers in the Mouth, and for  
swelled and stinking Gums:

Take Itis Illyrica, *{Florentine* Orris) Sandarach, Cyperus,  
each four Drams. ten Grains; Plumous Alum, (some  
Copies add Mynh) Saffron, Crocomagma, each two  
Drams; pound them, and mix them together. *Galen.de  
Camp. Medic. Sec. Loc. Lib.* 6. *Cap. 2.*

*Ios-Anthera, css Collyrium,* for Defluxions and Pains in the  
Eyes, which gives Relief within an Hour:

Take of Saffron, four Drams ten Grains; Frankincense, two  
Drams five Grains;.Cinnabar, sour Drams ten Grains;

. - Gum Arabic, two Drams five Grains. Infuse them in  
Wine, and when there is Occasion, bruise them till you  
have reduced them to a solid Mels, which make into a  
Lints with Honey. *Idem ibid. Lib. 4. Cop.* 7.

This Composition, as prepaced by *Oribastus* anil *Aetius, Aetii  
Tetr.* 2. *Sem. 4. Cape 22.* is little different from the preceding,  
and recommended by them in Ulcerations of the Mouth.

This Medicine *Anthera* is recommended by *Caelius Aurei.  
Acut. Moria Lib.* 3. *Cap.* 3. as good in a Qnimey.

The same is recommended by *Ρ. Aeginet. Lib.* **3.** *Cap.* **66-**in an Ulceration of the Womb.

ANTHERA in *Galen, Celsos, Paulus, Aecius,* and others,  
is the Name of a compounded Medicine appointed for different  
Parts of the Body, as *Anthera Stomachica,* sec. some in the Form  
of Powders, and some made up with Honey, still keeping the  
fame Name, not taken from the Howers of Roses, whereof in  
marry of them there were none, but from the lively Colour of  
the ingredients.

ANTHERAE, in Botany, signifies the Summits, 0t little

**Heath,** in the Middle of the Flower, supported-by the Stamina,  
hut properly thefe of Roses.

. ANTHEREON, Ἀνίερεών, the Chin, and that Part of the  
Face where the Beard grows, *Hisechius* takes it for that Part  
under the Chin whence the Beard begins to sprout. *Pollsc. Lib.*2. Understands it much in the same Sense. *Suidas* explains it  
of the Beginning of the Neck and Throat; and in this Seine  
it is taken by *Callus Aurel. Lip.* 3. *Cap.* 3. et 4. *Aon.* where  
he renders it *Gutturis Exordium,* " the Beginning of the  
"Throat.And again. *Lib.* I. *Cap.* 3. *Tard.* he says. *Utram.  
que Gutturis Partem, quam Graeci ’Ar&imajra vocant,* " both

Parts of the Tbroat, which are called by the *Greeks, Anthe-  
" reem,* by the *Latins, Ruma.Hippocr. Lib. so Epidem.*and *Lib. xuri* ἰστέων φύσ. feems by Ἀνθερεών to mean rhe Chin.

ANTHERICOS, ’Amipwh. the Name theAntlents gave  
to the Stalk or Stem of the Asphodel. “ *Theophrastus,* as *Pliny*" fays. *Lib.* 21. *Cap.* 17. and the *Greeks* for the Generality,  
" and amongst them their principal Leader *Pythagoras,* call’d  
" the Smik of this Plant, which is a Cubit, and often nines two  
" Cubits long, with Leaves like the Wlld Leek, by the Name  
*" of Antherices s* and its bulbous Root they *cAied-Asphodeles.*" We, says he, call the Stalk *Albueus,* and the Asphodelos is  
" our *Hastula Regia. ” Diofcorides, Lib.i.Cap.* 199. makes  
*.Anthericos* to he the Flower of the Asphodel. *Hisechius ex-  
pounds* ἀνὕέβικας. the Stalk of the Asphodel, and also a Kind of  
Herb. *Eustathius, Various,* and the Scholiast on the first Idyl  
*oiTheecritus,* make it the Fruit Or Stalk ofthe Asphodel. *Hip-  
pocrates (Coaca Pra.)* feems to take it for the cubital Stern of  
the Asphodel, when, in. Order to examine whether there be any  
Bone Of the Head broken or not, he advifes the putting of  
the Stalk of Asphodel, or of Galbanum,, ἀνοἱεικόν η *rdsenea,*between the Teeth, and bidding the Patient to chew it.

*Suidas* tells us, that the Stalks of the Asphodel were called  
by *Theocritus and Heradetus,.* durcedar. which he says, were of  
so tenacious a Substance, that they could not he broken. The  
same Author says, that ἀοθέδιξ, *sodurherix)* is so to he taken in  
the Scholiast on *Theacritus, in Theophrastus* and *Idaus. Apol-  
lederus Dorienses* will only have the Stalk called by that Name.  
Some take ἀνβέειξ for the Tore of the Beards of Corn, or for  
the Stalks. -

*Plutarch,* in his Banquet of the Seven Wife Men, when he ‘  
explains that noted Passage *ary Hasted, ''Dior* ἐν μανὰχ? τί καὶ da-  
φοδέλω μέγ’ ονειαρ, “ What great Refreshment there is in Mal-  
" lows and Asphodel,” feems to take'.AvStemir for the As- -  
phndel. *e -*

ANTHERON, Ἀνδηρετ, florid. See ANTHOs.

ANTHEROPHYLLUS, ANTHOPHYLLUS. See GA-  
**RYOPHYLLUs. "**

ANTHIA, Ἀνβία, a kind of Fish, aS appears from *Opplan,  
Aniestes.Randeletius,* and *Aldrovanduss* but they disagree in their  
Descriptions. The Gall of this Fish is recommended by *Kira-  
mides,* as he is quoted by *Aldresvondus,* as good against Exanthe-  
mata, and the Fat against Tumors and Abscesses. *Castellus.*

ANTHINES, ANTHINOS, ’Ανβινὴς, άνοἱεὸς, from ἄνθος,  
a Flower. An Epithet of sirme medicated Wines and Oils.  
Such Wines had Flowers infused, Or were sweet-scented, and  
called *Vina Odorata,* smelling like Flowers. The Oil that had  
this Epithet, was *Oleum Ltliaceum,* or *Lirintm,* or *Susinam,*which are ell the same. There was also the ἀνθινὀν *quicyr,  
Anthersum Unguentum,* the fame also as the *Sustnurn* or *Liliaceum, -*and differed from the Oil of that Name only, as *Galen* says,  
by the Mixture of some Spices. .

**ANTHONOR, the fame as ATHANOR, which see.**

ANTHORA. See AcoNrTuM. r

ANTHOS, Ἄνβος, a Flower. Ἄνὕος, in *Hippocrates,* sig-  
nifies not only all Sorts of Flowers, but sometimes, according  
*to Galen,* signifies Seeds also; and in *Coac. Pron.* Ἀεἡεα  
(in the plural Numher) means the fame as έρυβίμκτα.  
Rednesses. He also frequently puts, ἀνὸος, for the *Fles Atris.*The Adjective *Anthrnn, urijprir, in Hippocrates,* is ufed to sig-  
nrfy florid, very red, and bloody. Thus, *Lila* 6. *Epid. Galea*explains ανὕηρἀ πτὑσματα, (florid Spit) by ἐρυθρἀ καὶ ὕφαιμα, red  
and bloody; and so in many other Places. *Aretaus* alfo, in  
*Peripn.* has πτὑελον δίαιμον, ἀνθηρὶν σφοδροι» "bloody Spit, ex-  
“ tremely florid.” Such as are of a very red Complexion, are  
called by *Hippocr, in Prorrhet.* ’Ανίεροὶ, " florid; ” and *urinesu  
σωμα, 11* a florid Body,” in *Epid.* 6. *Aph.* 3. *Sect.* 3. is a Body  
that has a Redness diffused Over it, by the increase of the natural  
Heat, and recalling the Blond and Spirits to the external Habit,  
which is the Sign of a plentiful and laudable Supply of All-  
menu

ANTHOS, when used alone, signifies the Flowers ofRofe-  
tnary; and is sometimes taken for the Plant, the’ improperly.

ANTHOSMIAS, ’Ανβοσμίας, from Ανθος, a Flower, and  
-όσμί. Smell An Epithet applled to Wines that are fbreet-  
soented, and of a **most** fragrant Smell. *Foestus.*

ANTHOUS, properly jfeascmavy; but, transferPd to Metals,  
**signifies** the fifth Essence, or Elixir of Gold. *Rulandus. .*

ANTHRACIA, ANTHRACOSIS, ANTHRAX. See  
**CARBUNCULUS.**

ANTHRACI 1ES, *'Amajurilum. Sec* ScHrsT os.  
ANTHRISCUS. See ScAHDIx.

. A NTH ROPE, Ἀνδρωπὴς or ’Αιίρωτίη, from ανὕρώτος. a  
Man. The hemaa Slain, so called by *Heradatus,* as *Vesalius*observes. *Lib.* 2. *Cap.* 5.

ANTHROPOLOGIA; ’Αν5ρωτί?.ογία, from άνρρωπος, a  
Man, and λόγος, *R* Discourse. A Dofctiotiosi of Mao, *Blan-  
earde*

ANTHROPOML l'RIA, Ἀνΐρωτομἑτεία, from ἄνθρωπος,  
a Man, and μέτρον, a Measure. A Survey of Man in all his  
Dimensions. *Castellus.*

ANTHROPOMORPHOS, Ἀνδρωπομορφος, from ἄνθρωπος,  
Man, and μορφὴν Shape. A Name for the *Mandragoras,* or  
Mandrake.

ANTHROPOSOPHIA, Ἀνρρωποσοφἰα, from ἄνθρωπος, a  
Man*r* and σοφνὰ, Wifdom, of Knowledge. The Knowledge,  
of the Nature of Man. *Castellus:*

ANTHYLLIS is a Plant, of which there are two Species:  
The first is, . .

ANTHYLLIS. PRIOR, Ossic. *Anthyllis leguminofa marina  
Baetica, vel Cretica, jive Auricula muris Camerarii,* Park.  
Theat. 1094. *Anthyllisfaleata Cretica,* ejusil. *Lots astmis, Jili-  
quis hirsutis circinatis,* C. B. Pin. 333. *Lota astinis, seliquis  
hirsutis circinatis, C. Bauhins,* Hist. Oxon. a. ISI. *Loto affi-  
nis, Anthyllis sulcata Cretica Parkinseno,* Ejufd. *Tripholium  
sulcatum.* Alp. Exot. 237. *Auricula muris Camerarii, J.* B.  
2. 387. Chain Itio. Ran Hist. I: 922. *Aeledicaga Cretica,  
Vulneraria facie,* Elem. Bos. 328. Toum. inst. 4I2. *Me-  
dicags Vulnerariae facie, Hispanica,* Ejufd. & Boerh. Ind. Α. 2.  
35. SEA KIDNEY-VETCH.

It grows in *Candy and Sicily,* &c. by the Sea-shores, and  
flowers in the Summer. *Dale.*

**ANTHyLLrs LFGUMINOSA;** *Vulneraria,* **Ossie** *Vulneras,  
ria rustica, I.* Β. 2. 362. Rail Synop. 3. 325. Toum. Inst.  
39I. Elem. Bot. 3II. Boerh. ind. A. 2. 48. Dill. Cat. Gissi .  
I 28. *Vulneraria rustica, Anthyllis magna, Anthyllis legumi.  
rasa.* Chain I67.- *Anthyllis leguminofa.* Ger.- I06O. Ernac.  
I24O. Rail Hist. I. -922. Mer. Pin: 8: *Anthyllis leguminofa  
Belgarum,* Merc. Bot. I. 20. Phyt. Brit. 9. *Anthyllis legu-  
rninofa vulgaris.* Park: *Anthyllis leguminofa. Lota affinis, Vul-  
neraria pratenses.* Hiss Oxon. 2. I 82. *Anthyllis,* Rivin. Irr;  
Tetr. *Anthyllis Rivim,* Buxb: 22. Rupp. FloI. Jen. 208.  
*Anthyllis Loto astinis. Vulneraria pratensis,* C: B. P. 332.  
KIDNEY-VETCH, LADYS-FINGER.

It grows in Pastures, and flowers in *Jurus* The Heth is in  
Use, and accounted a Vuinerary. *Dale.*

There are two Species of *Anthyllis*; one has soft Leaves very  
like thofe of Lentils, a Palm in Height; the Root is sinall and  
flendeI. It grows in sandy and sirnny Places, and is of a saltish  
Taste:

The other Species has Leaves and Branches resembling  
Groundpine, but more harry, shorter, and rougher. It bears  
a purple Flower, which has a very strong Smell, and has a  
Root like Succory.

The Herb, drank to-the Quantity Of four Drains ten Grains;  
is a powerful Remedy against a Difficulty of Urine, and Diseases  
of the Kidneys. Both Kinds bruised, and applied as a Pessary  
with Oil of Rofes and Milk, asswage Inflammadons of the  
Uterus, and are allo Vulneraries. That Species which is like  
Groundpine, besides other Virtues, bring taken in Oxymel,  
cures the Falling-sickness. *Diofcorides, Lib.* 3. Cap. I53.  
- I find no Virtues attributed to the Anthyllis, but what are  
-transcribed from *Diofcorides. Dale* tranflates φλεγμονἀς τάς  
*is* ὑστέρα, *Uteci Pituitas,* which is a Mistake; for it signifies  
Inflammations of the Uterus. ,

ANTHYPNOTICA, Ανθυπνοτικἀ, from ἀντὶ, against, and  
if-τινος, Sleep. Medicines against excessive or preternatural  
Sleep. *Blanc. ..*

ANTHYPOCHONDRIACA, Ἀνὕυποχονδειαζἀ, from  
.ἀντὶ, against, and ὑποχονδεια, the Hypochondria. Medicines  
against Disorders in the Hypochondria. *Biancard.*

ANTHYSTERICA, 'Ανβυστεριόσ, from ἀντι, and ὑστέρμ,  
the Uterus, Medicines against the Hysterical Passion. *.Blanc.*

ANTIADES, ’Αντιἀδ'ες, the. Tonsils. -It sotnetimes signi-  
fies the Tonsils when inflamed.

ANTlAGRI, from Ἀντιάδἱς, and άγρι, a Prey. Tumors  
of the Tonsils.

ANTIARTHRmCA, ’Αἐτιαρβειτικἀ, from *drri, and*ἀμείοις, the Gout. Medicines againstthe Gout.

ANTiBALLOMENA, Ἀντιβαλλομεια. **SeeANTEMBAL-  
LoMENOS.**

ANTICACHECTICA, Ἀντικαχἀκτικἀ, from ἀκτι, against,  
ζηδ καχεξία, a Cachexy. Remedies which amend a Cachexy.  
See **CACHEXY. . .**

ANTICADMIA, a- Species of Cadmia, called also *Pseuda-  
cadmia*; ἀντὶ is here joined with it, to express its being firb-  
slituted for the true Cadmis. See CADMIA.

ANTICAR, Borax. *Dora, Ridandus, Jmajfon, Castellus.*

ANTICARDIUM, the fame tat ScRoBIcULUM CORDIS,  
which see.

ANTICATARRHALIS, the Epithet of any Remedy for  
a Catarrh.

ANTICAUSOTICUS, from sivri, against, and καἄσος, a  
burning Fever. An Epithet for Remedies against a *Causes,* or  
burning Fever. '

ANTICHEiR, ἀντἱχβρ, from ἀντι, over-against, and χειτε  
the Hand. The Thumb. See PoLLBx.

ANTICIPANS, this the *Greeks* express by προ?.ηπτιν.όσ. It is  
applied to Diseases, whofe Paroxysms anticipate the Time ofthe  
preceding Paroxysm; that is, each of whofe Fits begin some-  
whet sooner than the. preceding. Thus, if a Quotidian comes  
one Day at Four in an Afternoon, the next Day at Three, and  
the next at Two, it is said to anticipate;

If the Catamenia also arrive sooner than the Ordinary Period,  
they are said to anticipate.

ANTICNEMION, ἀντικεήμιον, from ἀντ?, over-against,  
and κνήμιι, the Leg, or Cass, of the Leg. In *Hippocrates* it  
signifies the Fore-part of the Tibia, which is bare Of Flesh.

ANTICOLICA, Remedies against the Colic

ANTICONTOSIS, άντνὰντωσις. from ἀντι, against, and  
κἐντος. a Staff, or Pole, *in Hippocrates* it signifies the sup-  
porting a Person with a Staff, or Crutch.

ANTIDINICA, from *iorti.* against, and δτεος, Circum-  
gyration. Medicines against a Vertigo, according to *Blancarde*

ANTIDOTARIUM, a Book wherein Antidotes are de-  
soribed, or the Place where they are made. It is much the  
same as *Dispensatory1. -*

ANTIDOTUS, or ANTIDOTUM, from *cirri,* against,  
and δίδωμι, to give. An Antidote. This Word is explained  
under the Article ANDRoMAcHUs, which see. -

The Philosophers Stone also is called by some Chymical Au-  
thors *ANTIDOT us,* by way *of* Excellence;

- ANTIDYSENTERICA, Remedies against a Dysentery.  
ANTIFEBRILE, an Epithet for a Remedy against aFever.  
ANTIFIDES, the Calx of Metals. *Rulandus.*

ANTIGONI COLLYRIUM NIGRUM, the black Colo  
lyrium, invented by *Antigonus,* is thus prepared:

*Take of* Cadinia, thirty-sin Drains twenty Grains; Anti-  
rnony, twenty-five Drains, Pepper, eight Drams twenty  
Grains; Verdegris, eight Drams twenty Grains; Gum  
Arabic, twenty-five Drams; bruife them, and make  
them up in Rain-water. *Cofmus* added to this Remedy,  
ten Drams twenty-five Grains of the Juice of Centaury ;  
in which he did right, in my Opinion. *Marcellus Emi  
piricus. . ...*

' ANTIHECTICA, Remedies against a Hectic Feveh  
*Biancard.*

ANTIHECTICUM POTERH, a Medicine invented by  
*Peterius,* called also *Antimmium Diaphoreticum Joviale.* It is  
thus prepared:

Take equal Quantities of Tin, and Martial Regulus of An-  
tainony, melt them in a large Crucible ; then put to them,  
by little and little, 'three times the Quantity of Nitre;  
after the Detonauon-and Noise is over, wash the Whole  
with warm Water, till no Saltness remains.

This is accounted a forcible penetrating Medrcine, insomuch  
as to make way through the minutest Passages, and search even  
the nervous Cells; whence, in all Disorders of that Original,  
it is reckoned very essectiral. in these Heavinesses of the Head,  
Giddiness, and Dimness of Sight, whence procced Apoplexies  
and Epilepsies, it does great Service. And in all Affections  
and Foulnesses of the Vifcera of the lower Belly, it is reckoned  
inferior to nothing in cleansing away and discharging their Im-  
purities. Thus it obtains in the Jaundice, Dropsies, and all  
Kinds of Cachexies. It is likewise esteemed of great Service  
even in obstinate Venereal Cafes, in clearing the Blond from all  
Impressions of Contagion, and cleansing the Glands from those  
corrosive Recrements which fitch Distempers frequently lodge  
upon them, and occasion Blotches, and ulcerous Deformities.  
In short, there is hardly a Preparation in the Chymical Phar-  
macy, of greater Efficacy in most obstinate Chronic Distem-  
pers ; but it is not often met with in Prescription, although  
constantly kept in the Sheps. The Dole is from six Grains to  
a Scruple in grown Persons; fur it is seldom given to Children,  
their tender Vessels not well hearing the Force of socti Medi.  
nines. *Quinofs Dispensatory.*

ANTshEPSIS, άντίληψες, from ἀετιλαμβάνω. or ἀντιλαμ-  
βἀνομαι. to fay hold of. *Hippocrates* in his Book κα.τ\* ἰητροῦον.  
speaking of Bandages, says, that if there is any Danger of a  
Bandage flipping upwards, the ANTiLEpsIs must hisbelow;  
hut if the Danger is of its flipping downwards, it must he above.  
By ANTILEPsIs, therefore, he means the Hold or Fixation ofa  
Bandage upon a found Part, either above or below the Part to  
he defended, in order to secure it from flipping off.

ANTILOBIUM, ἀκτιλοβιον, rhat Parr of the Far which is  
oppositetD theimbe. I suppose it means the Tragus.

; ANTILOGLA, from ἀντὶ, against, and πέγμ to speak.  
Contradiction.

ANTILOIMICA, from ἀντὶ, against, and *retests, the*Plague. Remedies against the Plague:

ANTILOPUS, Offic. *Gascella Africana,* Rafi Synop. A.-  
79. *Capra strepstccros,* Aldrov. de Quad. Bisul. 740. Charlt.  
Exer. IO. *Strepstciceros,* Bellon. Obs nd. Clof. 21. Caii de  
Animal. 56. Gash, de Quad. 294. THE ANTELOPE.  
*Dale.*

. This is an *African* Beast like a Deer, remarkable for Swift-  
ness. The Hoofs and Horns are ufed in Medicine, and are  
esteemed good against the Epilepsy and Hysterics.

AhiTILYSSUS, from ἀντι, against, and λνὰα, that Spe-  
cies of Madness which is caused by the Bite of a mad Dog. -  
An Epithet for a Composition against this Madness Thus a  
Composition' of equal Parts of the *Lichen Cinereus Terrestris,*Greyground Liverwort, and biack Pepper, is given in the Col-  
lege Difpenfatory, under the Title of *Pulvis Ancilyjsas.*

ANTIMONIUM, Antimony. A great many excellent  
Medicines are furnished by this Mineral, to rhe regular Practice  
of Physic; and most of the empirical Nostrums which have  
made any considerable Figure, have been sound to he Prepa-  
Iations thereof. Hence it has become a very important Sub-  
led, infomuch that manyVolumes have been written concerning  
it. Amongst thefe are *Basel Valentine's Currus Triumphalis* of  
Antimony, which, by the way, is not always to be depended  
on , *znd 'Limerses Traite de st Antimonic. Angelus Saia* has allo  
written well upon it. ' 'ἀ ’ \_

*Stibium,* or Antimony of the Shops, ςιμμι of *Diofcirides,*probably the τετραγωνον *of Hippocrates, Lapis Spuma candida  
nitentiseue, non tamen transtucentis,* of *Pliny* j *Ailmad,* or *Ala-  
mad, of the Arabians* is a metallic, folid, heavy, brittle Sub-  
stance, of a Lead-colour, with long sinning SUeaks, fusible  
bv Fire, but not ductile. Native Antimony is of different  
Rinds, some is dug up with the Appearances of polished Iron  
or Lead, but brittle, and mixed with white or crystalline Stones.  
Some is composed of fine shining Lines-like Needles, sometimes  
disposed in regular Ranks, sometimes without any observable  
Order, which is termed Male Antimony. Some is disposed in  
thin broad Pistes, or *Lamina,* called Female Antimony by  
*Pliny.* Some is a Congeries Of fmall Lead-colouPd Rods, got  
from a tender white Stone, and easily melting in the Fire like  
Sulphur, which enters its Composition in great Quantities.  
Antimony of this Kind is found in several Pans of *Italy.* Some  
is marked with Sassron-coloimid or reddish Spots, as the *Hun-  
garian* Antimony, mightily esteem’d by Chymists, because of  
the Golden Sulphur with which they imagine it to be stor'd.  
Antimony is sometimes found in a particular Ore, but most  
commonly mixed with other Metals ; and hence its Name may  
have heen derived. Antimony being the same as αντίμπον, an  
Enemy to Solitude.

Ores of Antimony are found in many Countries, and very  
plentifully in feveral Provinces of *France,* as *Auvergne, Psictm,  
Britany,* and others. ' The Glebes of Antimony are dug out  
of the Earthi mixed with a stony Matter, and the pure. Mi-  
neral or Metal is separated by breaking the Glebe into small  
Pieces, and afterwards treating It in the same Manner as in  
refining other imperfect Metals.

The *French* Antimony consists of almost equal Parts of com-  
mon Sulphur, and of a Reguline' Substance. The Sulphur in  
Antimony is discover’d by the Smell, and the blue Flame which  
it emits, when calcin’d in a dark Place , and when thrown  
into a Crucible with Nitre, it fulgurates in the same manner  
as a Mixture of Nitre and Sulphur. By distilling Antimony  
with corrosive Sublimate, we get the Cinnabar of Antimony,  
which consists , of the Sulphur of Antimony, and the Quick-  
silver of the Sublimate. If Antimony he boiled in common  
Water, mixed with four times its Quantity of Qnich-lmie, or'  
Pot-ash, the Sulphur it contains, being dissolved in the Water,  
by means of the alcaline Salts, may he precipitated by Vinegar,  
or any other Acid. The Reguline Substance is fusible, not  
ductile, shining like polish’d Iron, and seems to consist of  
broad IAminse ; which, when the Regnius is rightly prepared,  
are disposed in a radiated Manner, fo as to exhibit the Appear-  
ance of a Star on it, upper Surface. This Regulus may, by  
heing calcin’d in the Sun, he separated from almost all its Sul-  
Thur, and turned to an astj-colouPd, true, vitrisiable CaIx j  
which, heuig melted by-a strong Fire, is converted into a hya-  
cinth- colour’d Glass. If to this Glasi, while in Fosion, any  
sulphurous or other inflammable Substance he added, it pre-  
sently recovers its Reguline Form and Splendor. Because of  
the great Quantity of Sulphur which Antimony contains, an  
acid Liquor may be extra&ed from it, in nothing different from  
Spirit ot Sulphur. From all which Observations, it is evident,  
that Antimony consists of a sulphurous Acid, of a bituminous,  
inflammable Part, and of a vitrisiable, Inetassic Farth, The  
Regnius of Antimony is dissolved by *Aq^ Regia* ; but is only  
calcined by the other Diilolvents of Mends, Antirnony dis-  
solves and destroys all Metals, except Gold, when melted with  
them. From this Property of Antimony, many Names have

been given it by Chymists ; such as, the devouring Wolf; *Sa.  
turn,* who eats his Children ; the Lead of the Wise, and  
the Sugar of the Sun ; because Gold, melted with Antimony,  
is purified from all other Metais with which it is mixed,, and  
comes out brighter and cleaner than hefore. Antimony is com-  
monly thought by Chymists to contain a true, but unripe,  
solar Sulphur ; and hence it has been called Leprous Gold, and  
the *Eus primum selare*; but the Sulphur of Metais is not differ-  
ent from the pure, original Susphur, or Oil of Animals and  
Vegetables. ... - . - - .

Among theAntients, Antimony was tiled to dye the *Supercilia*and *Cilia* black. Accordingly we find in Scripture, that the  
wicked Queen *Jexebel,* in order to charm the King her Hus-  
band, painted her Eyes with Antimony; and the Women,  
who ufed that Practice, are also reproved by the Prophets; and  
from thence it was, that this Mineral got the Name of γυναι-  
κοῦον. See ALcoHoL.

Antimony, according to *Diofcorides,* is astringent, obstructs  
the Passages, cools, prevents Excrescences in the Flesh,, cica-  
nines Ulcers, stops Bleeding, and cleanses the Filth and Ulcers  
of the Fyes. *Galen* mentions its astringent and drying Virtue,  
and says, that it was used by Oculists in their dry Collynums in  
that Intention. It was the Custom of the Antients to burn,  
it, then to quench it in Womens Milk, or Wine, and, have-  
ing afterwards reduced it to Powder,- to make it up into little  
Pastils, which being perhaps of a quadrangular Figure, it was  
from thence called τἐτραγωνον by *Hippocrates.* The emetic  
Virtue of Antimony seems to have heen unknown to the An-  
dents,, or, at least, they seldom ufed it as such, or as a Cathar-  
tic. *Diofcorides,* indeed, mentions it in one Piace, as an In- '  
gradient in a purging Medicine made of *Elaterium* and Salt ;  
but the Antimony feerns to have been there ordered only to  
give a Colour to the Composition. Its cathartic Quallty.be-  
Came generally known about the twelfth Century, in which  
a *German* Benedictine Monk, named *Easel Valentine,* pub-  
lished a Book called *Currus Triumphalis Antimmii,* where he  
extols the Virtues of that Mineral and its Preparations in the  
Cute ofan insinite Numher of Diseases. . In the 15th Cen- -  
tury, *Paracelsus,* following the. reigning Opinion, made the  
Fame of the virtues of Antimony become still more universal j  
however. Physicians disputed, afterwards with great Warmth  
and Virulence, concerning the heneficial and deleterious Qua-  
lities qf Antimony. At prefent they are all agreed, that it is  
a very powerful and fafe Medicine; and they acknowledge  
two Virtues in it, depending on its different Preparations,  
one emetic, or cathartic, the other diaphoretic ; for all Me-  
dicines prepaced from Antimony do either purge upward or  
downward, or are diaphoretic and sudorific. Crude Antimony  
is seldom used in Physic ; tho’ it is certain, that it possesses no  
hurtful Qualities, since it-may be taken inwardly in the Quan-  
tity of a Dram or two, without exciting any Nausea, and  
is often boil’d in sudorific and drying Apozems, without commu-  
nicating to them any emetic or other.prejudicial Quality ; and,  
indeed, that Way of treating Antimony has no Essed at all,  
since it conmunicates nothing to the Water, at least nothing  
that the Water can retain, hew long soever it he boiled in is.  
The active Qualities of this Mineral are therefore entirely owe-  
ing to its Preparations, except it he render'd emetic by feme  
acid Juices which it meets with in the Stomach..

Crude Antimony, taken inwardly, in the above-mentioned  
Quantity, dissolves Viscidities in the Fluids, opens Obstru-  
ctions, and is commended by some as a safe Remedy in cuta-  
neous Diseases, in Consumptions and Epllepsies. It is like-.  
wisis of great Use in fattening Brutes. The external Use of it  
is likewise recommended for drying Ulcers, in curing the Itch,  
and other Diseases of the Skin, when mixed in Ointments;  
in Plaisters for resolving Tumors ; and in *Ccllpria for* Inflam-  
mations, and other Affections of the Eyes.

The most common Preparations of Antimony are the *Hepar,*or Liver of Antimony; *Crocus Metallcrum, r intern Stibiatum,*Emetic Tartar, Glass of Antimony ; the Golden Sulphur of  
Antimony ; and the Flowers, Butter, and Cinnabar of Anti.  
mony j. the Powder of Algaroth ; the universal *Panacea,*Bezoar Mineral Diaphoretic Calx, or Diaphoretic Mineral;  
and the Tincture. *Geoffrey.*

. Mr. *Reaumur* gives the following Account of the Contexture  
of Antimony.

i Nothing is more common than to obferve, aS it were, long  
and shining Needles on the Surface of broken Antimony ; and  
. that on which they, are most distinct and visible, is esteem’d the  
bell. Sometimes thefe Streaks arc rang’d with so much Order,  
and branch out with so much Regularity in certain Directions,  
that even those who have daily Opportunities of observing this  
Phenomenon, can’t help heing struck with its Beauty; The  
.Figures of the constituent Molecules of this Mineral may pos-  
sibly contributo something to the Formation of these Needles :  
But the Texture and Configuranon of the constituent Parts will  
not alone account for the Disposition of thefe Streaks, and  
their Arrangement with regard to each other ; since upon  
breaking different Lumps of the same Antimony, and of the

feme Shape, we often observe quite different Arrangements os  
these Streaks or Needles. Let ns take, for Instance, equal  
Masses os Antimony, os a regular conical Figure, because this  
Mineral is generally melted in a Species os Crucibles which re-  
. semble a Funnel, or an inverted Cone. Let several os these  
conical Masses be broken, each into several Parts; and we shall  
find the Needles os the same Cone disposed in different Di-  
rections, and varying in each different Piece. In one os these  
Masses, from a certain Height, we may observe all the Nee-  
dles directed m the Point os the Cone ; a little higher, the  
Needles shali he horizontal, or nearly perpendicular to the sori  
mer; above these we shall observe others which shall some-  
times he all directed to some Point os the Base os the Cone,  
and sometimes divide themselves into Cones, which shall have  
different Summits. In another of these Masses we shall not  
find the Needles disposed in an horizontal Direction, but running  
into conical Parcels, in Directions quite the reverse of each  
other ; that is, one conical Parcel shall have its Summit point-  
ing to the Apex of the Cone, and that os the other shall be di-  
rected to the Base. In some Lumps we shall perceive Needles  
every-where ; in others we shall discover none at all. Often  
these Needles appear in one Part os the Lump, when no such  
thing is to he seen in the rest. Very commonly we see them  
disposed in Parcels os a conical Figure, whatever the external  
Form and Shape os the Lump is ; for the internal Cones have  
no Dependence upon the external conical Form of the common  
Mass. Sometimes the Needles are disposed along the Sides of  
the Cone, and their Direction seems to follow the Sides of the  
Vessel in which they hecame fixed.

Notwithstanding these Varieties, the Cause which contri-  
butes to the Production and Arrangement of these Needles, is  
manifest ; and however-little we may advert to it, seems to he  
owing to nothing else hut that Refrigeration," by means of which  
the mineral Substance is changed from a fluid into a solid State.

It is to this Refrigeration, and its Progress, that the Needles of  
Antimony owe their Preduction and Direction: Any Sub-  
stance, whose Fluidity depends only on the gross Particles os  
the Fine, which separate and agitate its constituent Molecules,  
resumes its former Solidity, when 'tis left to itself; and when  
the Particles os the Fire are dissipated : Now these cannot pos-  
sibly he dissipated but successively, and in a certain Order,  
which is generally such, that those Parts of the melted Sub-  
stance, which are either next to the Sides or the Mouth of the  
Crucible, first assume a Consistence ; then , the Molecules next  
to these become fixed, and so on till the whole Mass loses its  
Fluidity . Now each fixed Molecule applies itself so much the  
more effectually and necessarily to that which is contiguous, as  
the Contact os each fix'd Molecule with that which is con-  
tiouous, contributes not a little to fix it, and deprive it of  
Motion.

Molecules, successively added to each other, form a kind os  
Fibres, Threads, or Needles, the Directions os which shew the  
particular Order in which the Refrigeration has been carry'd on-  
Is the Crucible was of the Shape of a hollow TBowl; if its  
Sides were every-where equally thick, equally warm, of the  
same Consistence, and equally acted upon by an Air equally  
cold ; and'if the melted Substance was os the same uniform  
Nature in all its Parts, all the Needles or Fibres would be so  
.many Rays terminating in the Centre of the Bowl. Is the  
Substance was such, that its fix'd Particles were almost all of

. at Length, we should find also concentrical Beds of Needles,  
form'd by Parceis os each Ray, and lying at equal Distances

- from the Centre. ’

. But so many remarkable Circumstances do by no means  
concur in the ordinary Refrigeration of Antimony ; neither  
is it possible they should Hence the Irregularities, of which  
we have been talking, must necessarily arise. I have, never-  
theless, made some Experiments in Crucibles of a conical  
Form, in winch I have generally given the Needles Directions ’  
pretty near those I intended they should have. When the  
Crucible, immediately after it is taken off the Fire full os fluid  
Antimony, is plac'd upon any Substance more capable of cool-  
ing it than the common Ain, then the Bottom and the Top of  
the Antimony contained in the Crucible, must necessarily be-  
come cool first. Accordingly, I have, upon trying the Experi-  
ment, often found the Needles divided into two Cones, one  
os winch had its Apejqat the Bottom of the Crucible, and the  
other its Apex near the shperior Surface of the Antimony.  
When, after taking the Crucible from the Furnace, I have  
put it upon some Coals, and also laid some upon the superior  
Surface of the Antimony, that the Sides might cool as soon.  
If not sooner than the rest, I have then found a Part of the  
Needles disposed horizontally, or, at least, there were Parcels  
of them which form'd Cones, some os which were almost per.,  
pendicular to certain Parts os the Sides os the Crucible. I have  
also more surely produced the same Effect, by accelerating  
the Refrigeration os particular Parts os the Crucible by touch-  
Ing them with a wet linen Cloth. Sometimes there is a Hal-  
low farm'd in the Middle of the Conical Mass of Antimony,

and in that Case we see Needles directed from the Sides os ’.her  
Hollow ; the first Beds which have become fixed, have serv'd  
instead os the Sides of the Crucible in tins Caso.

That the Needles may he arranged with Regularity, 'tis  
above all things necessary, that the Refrigeration he carried on  
Ilowly, or otherwise one Molecule becomes fixed before it can  
he wed adapted and adjusted to the End of another fix’d Mo.  
lecule. Is, nevertheless, the Refrigeration is too flowly mads,  
we shall have no more Needles than is it had been too precipi-  
tately carry'd on; that same Arrangement, winch existed during  
the State of Fusion, remaining, the Particles of the Fire make  
their Escape insensibly, and almost equally, from all the Parts  
of the Mass : In this Case, all the Molecules owe their Dispo-  
fitions, aS well aS then State of Rest, to the Fire’s ceasing to  
agitate them ; and here the Contact of the Molecules already  
fixed, does not any more contribute much to stop the Motions of  
the other Molecules. Thus when I have left the Crucible full os  
melted Antimony upon live Coals, till they were extinguished,  
it has sometimes happened that I have notfound a single Groinin'  
os Needles in all the Mass ; and even when I sound any, they  
were very few in Number.

In short, it seems so probable, that the Formation and Dis-  
position of the Needles of Antimony are the Effects of a Refri-  
geration, that is neither too quick, nor too flow, that it '  
would be superfluous to support and maintain this Opinion by  
a longer Detail of Experiments. Instead of being surprised  
at such a Phenomenon in this Mineral, methinks we ought  
rather to be astonish'd, that we do not find the same Appear-  
ances in all other Substances, which have been melted by the ,  
Fire, and afterwards become fixed. The Refrigeration in them  
must he made in the same Order aS in Antimony, and must con-  
sequently produce similar Arrangements. This is, indeed, a  
plausible Dilemma, and a Circumstance, which throws a kind  
of Diffidence into the Mind, with regard to the Truth of a  
very specious and probable Hypothesis : For Masses os Metal,  
upon bring broken, do nor present us with the same Appearances  
that Antimony does. I am not ignorant, that curious and IkilfuI  
Naturalists have purposely cool'd Masses of. Metal as ’flowly aS  
possible, without ever bring able by that means to render the  
Arrangement os'heir Parts sensible. But because the Ar-  
rangement os the Parts is not perceptible In a Mass of -Metal,  
as it is in Antimony, does it thence follow, that there is no  
such Arrangement in the former, as well as in the latter ?  
Surely not. The Mass of Antimony is a brittle Substance, and ’  
its Parts are so much the more easily and thoroughly disengaged,  
aS they do not mutually yield to each other. If one strikes a  
Mass os Antimony, it flies into Pieces, every one of which re-  
tains the same Arrangement *of* Parts It did before the common  
Mass was broken. This is not the Case with Masses of Metal ;  
for they yield to Blows, a Circumstance which makes their Paris  
assume new Arrangements. One cannot break them till these  
new Arrangements have put the Parts into such a State, aS that  
it is more easy for them to separate from one another, than to  
dispose themselves otherwise than they are; and consequently this  
State is very different from that which they were in originally.  
All the Parts then may be as regularly arrang'd in a ductile Mass,  
as in a brittle one, without our heing able to discover that Arrange-  
ment, winch we must necessarily conceive to be in it. But there  
are Means, notwithstanding the Ductility, and even the greatest  
Ductility, os a Metal, *of* observing this Arrangement of Pans  
which has hitherto escap'd our Eyes. Lead itself will eVen diss  
cover its Arrangement, is observ'd in the favourable Moment;  
All Metals are more or less ductile when cold , they also aye so,  
when hot in a certain Degree, heyond which they are no  
more, properly speaking, ductile ; their Molecules, bring too  
far removed from each other, cohere hut flightly, and may be  
entirely separated by the first Blow they receive; provided it is  
but moderately severe. What happens to all brittle Bedies,  
happens partly to them on this Occasion ; so that their being  
broken, when in this State, allows us to discover the Disposition  
and Arrangement of their internal Parts. This Observation . I  
made first upon Lead. Is it., is broken when Cold, we observe  
no Granulations in it ; but I happen'd to break a Mass os it  
when pretty hot, and was surprised to find it as much granu-  
lated as a Piece of temper'd Steel when broken. The same  
Lead, when hecome cold, could not be broken without reiterated  
Blows, neither did Granulations appear any more in the. Parts  
where it was broken : Now fince Lead, when hot, has Granu-  
lations ; fince it retains them at the Very Time it acquires a  
perfect Consistence, and when its Heat is too faint to keep it in  
aState os Fusion; hence it is evident, that it must also haveGra-  
nu lations when entirely hold. There is no Cause to reunite  
these Granulations, and reduce many of them into one, in the  
one Case more than in the other ; het the Blows os the Ham-  
mer will occasion such a Reunion in the cold Lead, whereas  
they will produce no such effect in that which is hot.

Having observed the Granulation of Lead, I imagin'd I might  
also discover a regular Arrangement of Parts init: With this View  
I melted some ofthis Metal in a conical Crucible, and allow'd it to

adinns ^Consistence by little and little; and when ithad acquit5d  
-.1 Amicient one, - I took it, as yet very hot, from the Crucible-,  
then \*a Blow of a Hammer easily divided it into some large  
Tumps, the fradured Parts -of which discovered to me those  
-Needles-and Fibres which I wanted to fee: The Granulations,  
- applied one against another, in certain Directions, formed these  
-Fibres ; there wereGroupes of them parallel to each other, and  
almost perpendicular to the Sides of the Crucible. In other  
Groupes all the Fibres were perpendicular to the Bottom of the  
’Crucible; and, in a Word, I saw, in the Lead, Fibres, such  
- as are cbsep. ed in Antimony, andwhofe Arrangement -and-Dif.  
: position were the fame.

Bet, at the fame time, 1 observed certain Differences be-  
tween the Fibres of Lead, for I shall give them thatName, and  
the Needles os Antimony: These latter are very shining, have  
. a lively sparkling Gloss, and are like fo many Mirrors, or small  
Glasses, applied to each other’s Ends; whereas the Fibres of  
*rthe Lead are less* sparksing, and are *fo* very far from bring stat,  
that thcy'are visibly round : To the naked Sight, or even with  
a Glass'that magnifies moderately, they only have the Appear-  
-ance of a Groupe ofainall Bowls, arranged like the Grains of  
a Chaplet; A Glafs which magnifies more, or a Microfcope,  
represents each of thofe Fibres not as very round ; and by their  
.means it appears, that the Fibre is form’d of Grains applied one  
-against another, only by a fmall Part of their Ends; and that,  
’ ’whereas the Sides of the-Ncedles of Antimony are strait, **there**of the Fibres of Lead are denticulated. When this Astair,  
which ί only hint at, at present, is more narrowly inquir’d into,  
'«twill perhaps be found, that it is upon this-Figure of theGra-  
nulations, and their-Arrangement, that the Ductility of Metals,  
and some other Substances, depends. We perceive already, that  
this Disposition leaves empty Spaces, which are‘silled up by the  
Parcels put out of their sormerSituation bytheBlowsof theHarn-  
tner ; that, by the Force of Blows, thefe Vacuities, or empty  
Spaces, must be in some measure filled up ; and that the Sub-  
stance then becomes less malleable. -In sine. Laminae, applied  
one above another, or one against another, without leaving be-  
tween them Interstices proportion’d to their Largeness, must  
necessarily compose brittle Masses, such as that of Antimony.  
I have already hinted, but I here repeat it again, that, inorder  
to fee the Disposition of the Fibres of Lead, it is necessary to  
-catchit in the favourable Moment If a Metal is struck when  
too hot, it is too much divided by the Blows of the Hammer,  
-and crumbled into Panels, most of which are no larger than  
‘Grains *of* Sand: If, on the other hand, the Metal is shuck  
when it is not sufficiently hot, it yields to the Blows, and ills-  
covers neither the Arrangement of the Granulations, nor **the**'Granulations themfelves. By repeating the Experiment twice  
-or thrice, one may sind the exaft Moment.

I have broken Masses of Tin, Copper, and Zinc, when hot,  
and was at no great Lofs to find, in each of them, the fame  
Granulation, and the same Fibres, I had discovered in Lead.  
We have no Reason to doubt, but the same Filaments are to he  
discovered in Gold and Silver; but -I have not, as yet, made  
-any Experiment with that View.

All soft Bedies, or such as are easily soften’d, as Wax, Tab  
low. Fat, Butter, have no Occasion for such a-Disposition of  
Parts; or if they have, we can never perceive it, hecause they  
never become brittle.

- All Masses which have been melted, thol brittle, may possi-  
bly not discover this Arrangement of their Parts upon their being  
broken. We have already observed, that too quick, or too flow  
a Refrigeration, may.prevent their being discovered, even in  
Antimony. In thofe Salts which are most disposed to form  
themfelves into Crystals, if they are made to crystalize too  
quickly, or agitated whilst the Crystalization should be carrying  
on, none will appear. The Parts of melted Bodies, in like  
manner, do not assume a regular Arrangement, if they are too  
- quickly refrigerated, or agitated during the Refrigeration. An-  
other Cause may, as yet, concur to disturb, or even totally pre-  
vent this Arrangement; which is, when the melted Body is  
trot an uniform Fluid; when it is composed of Parts, some of  
which have a greater Disposition to become fix'd than others,  
which have only rhe fame Degree of Heat with themfelves.  
The Formation of Fibres, Filaments, and Needles, is the Ef-  
feci of a successive Refrigeration ; or, to fpeak more accurately,  
' of the Parts acquiring a successive Consistence. If thofe Parts  
of any melted Substance, which ate remote from the Sides of  
-the Vessel, should become fixed, before such Parts as are nearer  
them have lost their Fluidity, there is no more any Reason,  
why these Parts should form a continued right Line with the  
others. The more any Fluid is mixed with these Parts, which  
have an equal Disposition to become fixed, the more difficult it  
will be for Needles to form themselves in it. and when rt  
-assumes a Consistence, the Threads will he the more interrupted  
in rt. *Mem- de s’ Acea. duri. sfner*

MI. *Geoffrey* makes the farther following Rematke upon An-  
timony, and its Preparations:

Vegetable Acids, bring, of their **own Nature, more attenir-**

ated than thofe which belong to Minerals, easily unite with the  
-rarefied Sulphur of Antimony; and thus separating that Sol-  
phut from the vitriolic Acid contained in the Antimony, an  
emetic Compound is formed; but minerul Acids, bring more  
dense, fix and wrap up the sulphurous Parts of Antimony, so  
as not to stimulate the Stomach and intestines, but to let then  
pass,freely into the Blond, before they can be disengaged, and  
aci according to their own Nature. Spirit of Wine destroys  
the emetic Quality of Antimony, hecaufe of the too great Pro-  
portion of sulphurous Parts, by which the faline *Spicula* are  
-so much involved, as not to be able to ndl on the Stomach.

Antimony is the most excellent Emetic we have, and the  
most sovereign Remedy in many Diseases, when rjghdy exhi-  
bited. In giving Emetics, , three things are to he considered ;  
the Patient, the Difeafe, and the Medicine. We ought, first  
of all, to be informed, whether the Patient vomits easily: Some  
Persons cannot be made to vomit with any Dofe of an anti-  
menial Medicine ; some are fo weak as not to he able to bear  
the Fatigue and Straining of a Vomit at all; fome are so sub-  
jeci to a Spitting of Blond, that, by giving them a strong Eme-  
tic, a fatal Haemorrhage might ensite. We -ought likewise to  
.know, whether the Patient has any considerable *Hernia,* in  
which Casis violent Vomiting might produce very dangerous  
Consequences; whether the Vessels be so full, as that a Rup-  
ture of any *Of* them may be apprehended ; and lastly, whether  
the Patient, if a Woman, -he with Child. In all thefe Cafes,  
Vomits seldom ought to be ventured upon, and never without  
taking- the greatest Precautions hefore-hand.

The second Thing to be considered, is the Disease itself, and  
especially, whether the Seat of it he in the .Blond, or in the *Pre-,  
haae sciae-,* the last of which may he discovered by a bitter Taste in  
the Mouth, Nausea, bilious Eructstions, acid Vomiting, *etc. '*

Some imagine, that Emetics can be of no real Service when  
the morbid Matter has reached the Mass of Blood, or when **the**Disease proceeds from **an** *Ataxia,* or Depravation of the Spirits,  
as in many spasmodic, hysterical, and hypochondriacal Affecti-  
ons: But this is a Mistake ; for we sind, antirnonial Vomits are  
given with very great Success in sirch Cafes ; not S0 much as  
they evacuate whet was. before contained in the Stomach, as hy  
deriving the morbid Mauer from the principal Parts, the Lungs,  
for Instance, or *Pleura,* when threaten’d, or aciually affected,  
into the Abdomen,, from whence it is easily and readily carried  
out of the Body. And, for this Reason, *Hippocrates,* very  
wisely, advises to have recourse to Vomits in the Beginnings of  
such Difeases. In Convussions an Emetic, by applying a Sti-  
mulus to the Fibres, of a contrary Nature'to that from whence  
the Disorder proceeds, very Often gets the better of that morbid  
Cause, and thus cures the Disease: For the same Reason Hip.,  
*picrates* gave Emetics in Diarrhoeas and Dysenteries, that **the**Tendency of thofe Evacuations might be directsd upwards, and  
so destroyed. In Comatose Affections, Emetics powerfully  
shake the Vifcera, increase the Ofcillations of the nervous Fi-  
bres over the whole .Body, and accelerate the Motion of  
the Fluids, or restore it, when lost, in any particular Part,  
so as to make them pass through **the** smallest Canals **to**their proper Emundlories. Thus we often see one Dose of an  
antirnonial Emetic prove likewise cathartic, sudorific, *etc.*in a very plentiful Degree. In giving thefe Emetics great Care  
ought to be taken, that none of the abdominal Viscera he rm-  
flamed ; hecaofe such Inflammations might very probably he  
increased by the Simin of Vomiting. We must not likewise  
he misted by all kinds of Reaching, or Attempts to vomit j for  
these are many times owing to convulsive Contractions of **the**Stomach, which by giving an Emetic may he increased, or per-  
haps that whole Bowel may he inflamed.

Thirdly, fuch Preparations of Antimony are to be chosen as  
may be given with Safety, of which the Dofe may not he **too**Seat for the Strength of the Patient, and yet may answer the  
tention of the Physician. Antirnoniais given in Powders of-  
ten disappoint Physicians, either by vomiting too much, or not  
at all. The Effects of Antirnonial Wines are very uncertain,  
becaufe of the different Qualities of Wines : But the most eX7.  
cellent Preparation of this kind is Emetic Tartar, which ought  
always to be given, dissolved in a proper Liquor, and not in too  
small a Dofe; because if it is not strong enough to have **the**desired Essed, it will he apt to fatigue and torment the Patient  
with fruitless Nauseas and Reaching^. Too great a Dofe may  
likewise be dangerous, by exciting too violent Contractions in  
the Stomach, and Strainings of other Viscera, so as to cause  
spitting or vomiting of Blood, long-contioued Readings with-  
out bringing up any thing, Convulsions, and Inflammations of  
**the** Viseera.

If from any Dose os Ahtimonisl Preparations, either too vio-  
lent or too long-contioued Vomitings should happen, the hest  
Method is to drink a Glass of Water or Ptisan, acidulated with  
a few Drops of *Ol. Sulphuris per Campanam,* or Spirit of Vi-  
triol, which will presently check the emetic Quality of the  
Antimony, and stop the Vomiting much more safely than  
Opium.

While the Emetic works, the Patient ought to 'drink very  
’plentifully, either luke-warm Water, Whey, or Vinal or  
Chicken-water, with a View both *to* dilute the Contents of the  
Stomach, to he thrown up, and to make the Vomiting more  
easy, and less straining. On the other hand. Oils, and ail sat  
-Substances, check the Force of the Emetic too soon, and pre-  
vent the Dilution of the Contents of the Stomach, and are  
therefore to be guarded against.

Besides the medicinal Uses of Antimony-, it is employed by  
several Artificers, to give the Silver Sound to Tin, in casting  
Bells, making metalline *Specula,* and Types for Printing, fcso.  
It is likewise used by Goldsmiths in refining Gold ; for when  
melted with that Metal, it deshoys all other Metals that can he  
mixed with it. Silver itself not excepted, and turns them to  
Dross. *Geoffrey.*

PROCESSES *upon* **ANTIMONY.**

P R O C Ε S S L

*The Solation of* **ANTIMONY** *in Aqua Regia.*

Take of the purest Antimony,- collected from the Tops of  
the Cones, half a Pound ; reduce it to Powder, and put it  
into a glass Vessel that is low, and pretty large, and cut  
off in such a manner aS to have a wide Mouth. Set the  
Vessel, with the Antimony, under a Chimney that will car-  
ry the Fumes up without dissipating them; and then pour,  
upon it half a Pound of Aqua Regia: By this means there  
will be excited an incredible Effervescence, with a prodi-  
gious Heat, Noise, and very red and dense Fumes, all  
which will soon he over. There will then remain at the  
Bottom a moist, thick, pappy Matter, of an Ash-colour,'  
inclining to Yellow. Dry this with a Very gentie Fire,  
keeping it now-and-then stirring with a Stick.

REMARKS.

This is called an immersive or humid Calcination of Antimony;  
’ by which' this Fossil, which before was neither emetic nor  
purgative, acquires the most virulent Qualities. The yellow  
Matter interspersed through this Calx,, is a true Sulphur of  
Antimony, which the Acid not being ablet.o dissolve, is dis-  
r charged from the other metalline Part of the Antimony,  
- which is corroded by the Aqua Regia. Hence, therefore, in  
\* this Operation, there is both a Calcination and Separation.

\*. This Process is necessary to those that follow.

P R O C Ε S S II.

*? True Sulphur of* **ANTIMONY.**

- Upon the Calx of the preceding Process pour some clean  
Water, shake them together, and pour off the turbid Li-  
quor into another Vessel; add more Water, shake and dee  
cant aS hefore ; and proceed in this manner, till the yellow  
lighter Part, being thus dispersed thro’ the turbid Waters,  
is separated from the more heavy metalline Portion. Mix  
the decanted Waters together, pour off the-whitish Wa-  
ter at Top from the sulphurous Matter that falis to the  
Bottom, which dry with a very gentie Fire, and it will be  
a true Sulphur in every Character. If you put larger  
Lumps of Antimony into Aqua-Regia, and so perform the  
Solution, then the Masses of Sulphur will he larger; for  
the Aqua Regis, penetrating to the larger Portions of the  
Metal, that lie concealed in the Sulphur, will dissolve and  
extract them, and so render the Masses of Sulphur more  
visible.

REMARKS.

Hence it appears, how intimately Sulphur may he con-  
cealed under the Appearance of a shining Metal, and how  
surprisingly the Aqua Regia can find out the metalline Part  
amongst the Sulphur. But how wonderfully does the Sulphur  
here retain its proper Nature, without any Alteration ? This  
is that Sulphur of Antimony which *Fan Hilmont* orders to he  
extracted, and which, he says, scarcely differs from the common  
Sulphur, except that it is a littlemore upon the Greenish ; and,  
indeed, there is scarcely any Difference: Nor, perhaps, does  
the Cinnabar that is made withtt, in regard of its Virtues,  
deserve so much Trouble: Certainly, the subliming it seven  
times, as he directs, is not so easily done as directed. In this  
Operation, however, we have an ocular Demonstration,  
that Antimony consists of a sulphurous and a metalline  
.Part.

’PROCESS III.

*Glas.s of* **ANTIMONY.**

I. Take of the purest Antimony, reduced to Powder, two  
Pounds; put it into a largo earthen Dish that is not glaz'd,  
and, in the open Air, place it over a Fire, in such a man-  
ner, that the Powder shall fume, but not melt. The  
whole Art depends on thus moderating the Fire: Keep

the Powder' continually stirring with an earthen Rodt A  
white, thick, fetid Fume will arise, which is prejudicial,  
and therefore must he cautiouily avoided by the Operator’s  
standing so, that the Wind shall blow it from him. Care-  
fully continue this Calcination, jin an equable mariner, till  
the Matter fumes-no longer. Then increase your Fire A  
little, and, if it begins to fume, keep it up till it ceases ; .  
and then make your Fire pretty strong, till the Dish begins  
to he red-hot, andine included Matter emits no more -  
Fumes; and you will, by this means, have a Calx ns 2  
grayish Colour. If you proceed to calcine this with a still  
greater Degree of Fire, till the Powder grows red-het,  
.' you will then have a yellow Calx, winch is more purified  
from the Volatile Part. If, in the Beginning of the Ope-  
ration, your Fine should happen to he so strong aS to melt  
the Antimony, and make it run into Lumps, you must  
immediately slacken your Fine, and reduce these again to  
Powder. This is the Calcination of crude Antimony, by  
means of Fire alone, and it is of great Use.

2. Put this Calx into a Crucible, round which place Fire at  
a Distance, gradually bringing it nearer and nearer,- that  
the Crucible may gentiy and equably grow warm, hot.  
Very hot, and at last red-hot, it being all the time close  
covered with a Ttle, that no Coals or Ashes may fall, into  
it.. Increase your Fine till the Calx is put in Fusion, in  
which State let it stand for half a Quarter *of* an Hour, and  
then pour it out upon a very hot, dry Marble, and you

. will have a brittie, sub-pellucid, hard Cake, os a dark-  
yellow Colour, which is called Glass of Antimony, and is  
so much clearer aS it .stands longer in the Fine.

R EM ARKS. :

Antimony consists of common Sulphur, and a metalline Glebe.  
All the Sulphur becomes Volatile, by the Fire made use of for  
this Calcination; but the metalline Part hears a melting Fire,  
as appears when it is melted into Cones ; but then it always  
yields a white suffocating Fume. Hence we know, that  
when powdered Antimony is ustulated with such a Fire aS is  
not sufficient to melt it, then the external Sulphuris gra-  
dually expelled ; by which means the metalline Part is puri-  
fled, and at last is converted into a tonified Calx, which, tho'  
the Antimony was innocent before, is a most Virulent Eme-  
tie: How this should happen, is not hitherto well explained.  
This Calx, being put in Fusion; is Antimony converted  
into Glasst The Adepts say, that there is a great Agreement  
hetwixt Lead and Antimony, which is confirm’d by the  
melting this Calx into Glass. This is almost a fatal Emetic,:

. If it is infused in a soft Wine, not too acid,, it yields an  
Emetic with Very little Loss of its Substance-. The Virtue;  
however, may be pretty soon drawn out, by repeating the In-  
fusion: This makes the Emetic Wine every-where sufficient-  
ly known. This Glass of Antimony consumes almost all  
metalline Bodies in the Test, but to Gold it gives a beautiful  
Colour. ' *Boerhaave.*

This, *Geoffrey* says, is of a Hyacinth-colour; but it may be  
made white, yellow, red, or black, by the Addition of Bo-  
rax, Sulphur, Sal Gem, or Orpiment. Glass of Antimony  
is a Very strong Emetic, but may be weaken'd by powdering  
it on a Marble, and then burning Spirit of Wine upon it,  
for three or four times: Thus deflagrated, it may be given  
in the Quantity of ten or twenty Grains, winch will either  
Vomit or purge gentiy, and sometimes only cause a Sweat ;  
on which Account it sometimes cures intermitting Fevers, if  
given a littie hefore the Paroxysm. If this Glass, reduced to  
an impalpable Powder, he digested, for two or three Days,  
with Spirit of Wine, in which half an Otfnce os Mastich has  
heen diflolved, shaking the Vessel often; and the Spirit he  
afterwards evaporated by a gentie Heat; the remaining Glass  
of Antimony and Mastich, incorporated in this manner, will  
ε have no emetic Quality. This Powder may be taken in the

- Quantity of six Grains. *Georfroy.*

P R O C E S S IV.

*A FcegulUs of* **ANTIMONY,** *With Salts,*

*i.* A Regulus is procured from Antimony by every Method  
in which the metalline Part is separated from the sulphur-  
ous ; and the more accurate this Separation is, the purer  
.always is the Regulus. In order to this, then, the fossil  
Antimony, in its native Glehe; is sometimes put into

' conical earthen Pots, and melted With a moderate Fire, that  
only makes it a littie red, and thus is formed into Cones 5  
the lower Parts of which, or those towards the Vertex, are  
heavy, purer, and more metalline; whilst the broader  
Parts, towards the Base, are less solid, darker, and more  
sulphurous. In this manner is Antimony depurated to a  
Regulus, by Fusion alone.

2. Take of common crude Nitre, two Parts; of good Tar-  
tar, three Parts; and of pure Antimony, four Parts : Dry  
these well, and separately reduce them to a fine Powder;

and whilst they are exceedingly dry, mix them intimately,  
. by rubbing them together. Make the Mixture moderately  
hot, and by all means Very dry. Take a large Crucible,  
heat it gradually in the Fine till it is perfectly red-het, and  
then throw into it two Drams of this dry hot Powder,  
which will take Fine Violently, and with a great Noise,  
and throw out Sparks on every Side, When every thing  
is quiet, throw in the same Quantity more, and you will  
again have, the very same Phenomena. Proceed in this  
-manner till you have consumed all your Powder. And  
here the sollowing Cautions are absolutely necessary: Let  
the Crucible be a large one, that the Matter, when it is  
. violently agitated, may not run over: Throw in het a lit-  
tie at a time, lest theMixtnre, when.it takeSFire, should  
fly in large Sparks out of the Vessel: Let the preceding  
-Portion he always throughly on Fire, be at Rest, and  
- perfectly red-hot, before you throw in another; for sear  
the Matter, being hotter underneath, and colder at Top,  
should form a Crust, under which the Fire, being confin'd,  
would cause an Explosion much louder, and more Violent,  
than that os a Cannon: For you have here a true *Pulvis  
tonitruanssusxu.* the Nitre, Tartar, and Sulphur of the An-  
timony. And lastly, let the Crucible be throughly red-  
hot, for sear of the same terrible Accident. If a young  
Beginner, not aware of these things, goes about to make .  
a Regulus, according to the common Directions, he runs  
a Risque of his Lise : If he observes these Cautions, he  
may perform the Operation safely. After the Detonation  
as completed, in the manner described, cover the Crucible  
with a Tile,, and increase your Fire till the Matter flows  
like Water: Have by you, at the same time, a metal-  
melting Cone, perfectly dry, a littie warm, and rubb'd  
rover on its Inside with Tallow, into which pour the melt-  
\*ed Matter with one Stream, and immediately strike the  
."Cone. Upon pouring in the Matter, a sudden Flame will  
. burst out from .the lighted Tallow. Let the Whole stand

quiet and cool, and then invert the Mould, and with a  
Hammer strike .it at the Base, and the Antirnonial Cone  
will drop out; the .lower or vertical Part of which will he  
the metalline Part Of the Antimony, whilst that towards  
the Base .will consist os the Salts and Sulphur. The upper  
Surface of the metalline Mass, where it is covered with the  
Scoriae, will he marked with the Figure of a Star. The  
.Scoriae will liquesy, and swell in the Ain

; R E M A R K 8. - I

AS this Process discovers to ns the true Principles os the Metal-  
lurgic Art, it is worth while to consider it a littie attentively :  
First, the fossil Antimonial Glehe, being melted with a pro-  
per Fire, becomes liquid antinheavy; Hence the lighter Bo-  
dies that are in it, as Stones Ed the like, and which do not  
.adhere to the metalline Part, according to the Laws of Hy-  
drostatics, are cast upwards; and so the heavier metalline Part  
is rendered purer. And thus, in the Metallurgic Art, the  
metalline Matter is often, by Fusion, separated from the  
rest.

But, by another Metallurgic Operation, the metalline Part of  
the Antimony is now freed from that Sulphur, from which it  
could not be separated by simple Fusion, but which still re-  
mained closely combined with it; and this is done by the  
Help of the Powder os Tartar, and Nitre, which is there-  
. fore a fluxing Powder. When the Antimony, which consists  
of a sulphureous and metalline Part, is mixed with the Nitre  
and Tartar, and committed to the Fire, then the Nitre,  
Tartar, and Sulphur of the Antimony take Fire with a pro-.  
digiouS Impetus; and by this means there is produced a fix'd  
A lcali from the Nitre and Tartar: But this fix'd. Alcali, being  
agitated with this intense Fire, greedily attracts the Sulphur,  
.and intimately unites it with itself; and then the metalline or  
mercurial Part, aS it is called, which is unaffected by an Al-  
cah, being freed from its Sulphur, and put sin Fusion, sub-  
sides from the lighter Parts, and collects itself at the Bottom  
into a Mass, which goes by the Name *of Regulus.* And as  
the long sharp Spicula of the Antimony dispose themselves  
.horizontally, from .the Centre to the Surface, henoe they  
form a Star, which the Alohemistical Magi call a *Stella Sig~  
naia,* and have in great Veneration. This Regulus, tho’ it  
appears pure, will, upon being fused again with an Alcali,  
produce fresh Scoriae .. Nos, perhaps, can it be eVer entirely  
freed from itsSulphur; and hence, probably, italways remains  
brittle; for Sulphur will render Metals so. The Scorise are  
the Sulphur os the Antimony, distblved in a fixed Alcali;  
and hence their Virtues are easily understood- The Regulus  
is emetic, as is the Glass, and, by Infusion, yields an Eme-  
tic Wine in the same manner. This, then, is another Me-  
thod os puris) ing Metals, by the Help of Salts, from every  
thing sulphurous, oily, and arsenical, which render the  
metalline Glebes brittle and Volatile *y and* which being entire-  
ly separated, the Metals become pure and fixed. *Boerhaave.*

The Proportions of the other Ingredients to the Antimony, and  
to each other, are somewhat differens, in the Receipts os  
different Authors.

*Lemery lens,* this may be given from two to eight Grains inter-  
nally; and *lfosilsen,* transcribing from him, is of the same  
Opinion. However, a Person that Ventures to give it inter-  
nally, should he Very well acquainted with the Effects os the  
Remedy, as well as with Diseases and Constitutions.

Of this Regulus os Antimony Cups are made, which comma-  
nicate an emetic Quality to Wine which has stood in them for  
a Night's-time. It is likewise made into littie Balis or Pi ls,  
which are both emetic and cathartics though swallowed a  
thousand times, from whence they have the Name os' the  
*Perpetual Pills. -*

*Reguli of* Iron, Copper, Tin, Lead, Silver, and. Gold, are  
made by melting these Metals with the *Regulus* of Antimony.  
The *Scoriae* found above the *Regulus* in the Cone, are os a  
yellow or saffron Colour, and sully impregnated with the  
Sulphur of Antimony. *Geoffroy.*

PRO CESS W μά

*Martial Regulus of* **ANTIMONY. .**

Take of new Filings of Iron, half a Pound; make them  
red-hot in a Crucible, and then gradually add os Antimo-  
ny, Very finely powdered, and made hot and dry, sixteen  
Ounces. Reep these in a strong Fire till they are through-  
ly melted; and, whilst they are in this State, throw in  
gradually, of the purest, driest, fine Powder , os Nitre,  
made very hot likewise, four Ounces. Urge this Mixture  
' with the strongest Fire, till it flows like Water,' and keep  
it in that Condition for a Quarter of an Hour ; and then,  
whilst it is perfectly fluid, pour it into a melting Cone,  
exactly aS in the preceding Process. By this means I have  
had a starry Regulus, as bright as Silver, to the Quantity  
of seven Ounces and a half. The Scoriae are of a very dif-  
ferent Nature from the former, dry, hard, irony, sulphur-  
Ous, saline, and acrid, and scarcely dissolve in the Air.

REMARKS.

The Sulphur of the dissolved Antimony here greedily unites  
- with the ignited ton ; and hence produces sulphurous Sco-  
riae os Iron. Upon adding the Nitre, this is strongly defla-  
grated with some Portion of the same Sulphur; and hence  
the Whole is made to stow by the Intensness of the Fire.  
When the Matter, then, is in this very liquid State, the me- .  
talline Part of the Antimony, which is heaviest, sinks, by its  
proper Weight, to the Bottom; whilst the Sulphur of the  
Antimony, the corroded Iron, and Nitre, are cast to the  
Top. *Paracelsus* asserted, that Iron would more intimately  
separate the sulphurous Part os Antimony from the mercu-  
rial, than could be effected by a vegetable Alcali; and hence  
that this Regulus was much the fittest to furnish us with the  
Mercury os Antimony, for the profounder Chymical Opera-  
tions. And certainly, we see, by this experiment, that Iron  
is capable os extracting the Sulphur from metalline Glebes,  
and giving them Fixity and Malleability. *Alexander Such-  
tentus,* a Scholar of *Paracelsus,* wrote two whole Trea-  
ψ rises of Antimony, from winch is borrowed the following

Process.

PROCESS VL

*Another Ragulus, called the* Alchemistical Regulus of ANTI-  
**MoNY.**

I. Take of Iron Nails, half a Pound; put them into a  
strong, large, sound Crucible, cover- it with a Tile, place  
it in a Wind-furnace, and cautiousiy raise a Fire till the  
Nails are perfectly ignited. Then, by a littie at a time,  
add of the best powdered Antimony, made Very dry and  
hot, sixteen Ounces, and cover the Crucible a littie with  
the Tile. AS soon as ever the Antimony is thrown in, it  
emits a white Fume; and, not a great while aster, is put  
into Fusion, and at the same time causes the Iron to melt  
also. When they are reduced to a very liquid State, which  
may he examined by a long Tobacco-pipe, throw in, gra-  
dually, os the hottest, driest Powder of Nitre, three  
Ounces. Upon every injection, there is excited a prodi-  
gions Ebullition, Noise, and Conflict, and .sometimes a  
Crackling; and jf a Person should unwarily throw in the  
Nitre damp, the Whole-would fly about with imminent  
Danger to the Operator. When they have stood in this  
Condition some time, the Matter casts out lucid Sparks.  
Let it flow, like Water, for the Space of four or fine Mi-  
nutes, and then pour it out into a melting Cone, which  
strike gentiy ; and when the Mass is grown cold, knock it  
out. In this manner I have had eleven Ounces six Drams  
of Regulus, and eleven Ounces of Scoriae ; so that, with  
what stuck to the Crucible whilst it was pouring out, there  
were lost four Ounces two Drama.

2. Put this Regulus into another Crucible, set it in the Fire,  
melt it, and, when it is in Fusion, add to it three Ounce\*  
of Antimony, reduced to Powder, and made very hot.and  
dry ; and when this is melted, throw in, by degrees, three  
Ounces of Powder of Nine, Very het and day also; -and  
then fuse them with an intense Fine, and keep the Matter  
in a perfect liquid State for the Space os five Minutes; after  
which pour it into a melting Cone as before. By this  
means I have procured ten Ounces and six Drams Of Regu-  
lus, which were purer than the former. ' - '

3. Take this second Regulus, put it into a fresh Crucible,  
melt it again, and throw into it three Ounces more of  
Nitre, with the same Cantion as before Melt the Mix- ’  
tore with a Very intense Fire, for otherwise it will not  
flow, and then pour it into a Cone. By this third Fusion  
I have had nine Ounces two Drams of an. exceeding white

- Silver-colour'd Regulus, that was surprisingly starry, and  
two Ounces, seven Drams of Scorhe; fo that there was loft

‘ One Ounce five Drams. , . . ' '

. 4. Once more melt this third ReguluS in another Crucible,  
and then add three Ounces of Nitre as before, which will  
then require a prodigious strong Fire to melt it, the’ the  
Regains flows at the Bottom of the Crucible like Water.

. Keep them in perfect Fusion for the Space of an Hour,  
and then pour them into a Cone. Thus then I have ob-  
tained seven Ounces three Drams of an exceeding pure and  
beautiful starry Regulus, that looked just like Silver, toge-  
ther with two Ounces seven Drams of Scorhe, of a golden  
Colour, and a perfect fiery Taste; which is a pretty extra-  
ordinary Phenomenon.

. 5. For this Operation, the Crucibles must he Vejy sound,  
strong, and large, and must he heated Very gradually:  
The Fire must he. .equably hept up to its greatest Strength,  
for otherwise the Nitre will pot melt; and the Cones must  
he moderately warm, very clean, and perfectly dry, and,  
within, rubbed over with Tallow. If you attend to these  
Cautions, you will meet with Success.

**- R’e M A R K S. \_ -**

There are many useful things to he learned from this Operation:  
Iron, which is extremely difficult of Fusion, melts in Anti-  
. -mony, as all other Metals do in Lead ; and then the Iron,  
. being corroded by the melted Antimony, becomes combined  
with its Sulphur; whilst hath the mercurial Part of the Iron  
*. and* the Antimony are expelled, and, uniting into one Mass,  
. Tall to the Bottom; and the Sulphur of them both rises toge-  
’ ther to the Top. , The Nitre that is thrown in bums fun-

Ousty with these sulphureous Bedies, agitates the melted Ele-  
InentS to their Very inmost Parts, and hence unites those that  
are similar, and separates the heterogeneous: By the Force  
of the Antimony the lron is destroy'd, and its metallic Sul-  
phur, which is the Gold of the Alchemists, unites with the  
. -internal metallic Sulphur of the Antimony, and thus both  
remain combined with the mercurial Part of the Antimony;  
and hence you have a ReguluS, which is beautified with a  
Star, and by its fine silver Colour teaches us the exceeding ..  
Purity of its Mercury. The Scoriae contain Iron, Sulphur  
os Antimony; and Nitre, united together, and changed into  
a wonderful Body, whose secret medicinal Virtues, when it  
is properly managed, and rightiy applied, those who are ac-  
quainted with these things greatly extol. These Scored puff  
up surprisingly in the Air: But let this suffice concerning the  
first Fusion. In the second, the external Sulphur is still far-  
. ther extracted, and the metalline Sulphurs of the Iron and

Antimony are more fixed, with their Mercuries, into a purer  
ReguluS. In the third Fusion, the surprising Power of the  
. sulphureous metallic Fire, that lies concealed in the Regu-

Ins, begins to discover itself, which, by fixing the Nitre,  
renders it exceeding difficult of Fusion, tho’ it was before  
melted by a more gentle Fire than any other native Salt ; and  
impresses upon it a remarkable igneous Quality, so that, upon  
being applied to the Tongue, it truly bums it, tho' its pro-  
per Taste is naturally exceedingly cold; it makes it, more-  
\* over, alcalescent, without the Addition of any Vegetable

Substance, and causes it to run spontaneoufly in the Ain, tho'  
'. it would remain dry in it hefore. The fourth Fusion disco.  
. vers the same things more evidently: Here the pure Sulphur,  
only by its odorous Exhalation, as it were, and simple Con-  
tact, changes the Nitre more powerfully, and thus demon-  
strates the secret Power of metallic Sulphurs.. This Regulus  
has almost turned the Heads of some of the profoundest Chy-  
mists. Consult *Paracelsus, Suchtenius, Philaletha, Pania-  
lean, Becher,* and *Stahl.* For my own Part, when I reflect  
- upon the Time and Pains I have employed in examining into  
' the Nature of this Regulus, I cannot forbear being surprised  
' at my own Patience, and can scarcely help being ashamed to  
- think, that so great aPart of my Life should have been spent  
in this Inquiry.

The Colour of Gold is exalted, or restated, when impaired,  
by means of this ReguluS ; as the exceeding white Nitre, by

being thrown into this ReguluS, in Fission, immediately con-  
tracts a golden Hue. The Regulus, depurated even in this  
manner, will Vomit. The Scoriae give a beautiful Tincture  
tn *Alcohol. ...*

**PRO CESS VIL**

*Golden Sulphur of* **ANTIMONY.**

Boil the Scoriae of Process 5. till they are all dissolved ; in-  
to the inodorous Liquor drop Vinegar, and there will in-  
stantiy arise, a most noisome, stercoraceous Smell, and the  
Liquor, which,before was thin, will become Very thick.

. Drop in more Vinegar, stir the Mixture about, and pro-  
ceed in this manner, till nothing more will precipitate.  
Let the Vessel stand quiet, and a Precipitate will gradually  
subside to the Bottom, which will he reduced to a much  
less Compass than one would expect. Pour off the Liquor

' that swims at Top ; wash the Precipitate with Water till  
if is absolutely insipid, dry it gentiy, and keep it under  
the Title **os SULPHUR AURATUM ANT1MONII.**

**REMARKS.**

\*' . - . . . \*

The Sulphur of Antimony min'd with an Alcali, makes the .  
Scoriseof Process the fifth. These, bod'd in Water, make a  
sulphureous Lixivium; and from this, by the Acid, the  
Sulphur is precipitated. This has a mild emetic Quality.  
If this is rubbed upon Silver, it makes is of the Colour of  
Gold, and hence it is called *Auratum. Bocrhaaue.*

*Bocrhaave,* we see, directs the Golden Sulphur of Antimony to  
he made with the Scoriae of the Martial ReguluS above de-  
scribed ; but it is usually made with the Scoriae of the com-  
mon Regulus.

Dr. *Plummcr* has, in the *Edinburgh* Medical essays, given a  
different Method of preparing the Sulphur of Antimony,  
from *Angelus Sala,* which is somewhat like that of the first  
and second Process above, tho' not exactly the same.

- Reduce Antimony to a gross Powder, or rather break it in  
small Pieces like Grains of Barley; separate the fine Dust  
by a Searce, and lay it aside;. then put the small Pieces  
into a flat-bottom'd Glass, pouring in Aqua Regis, till .It  
rises a Finger's Breadth above the Antimony. Let the  
Solution go on without Heat; and when there appears a  
sulphureous or pitchy Matter swimming on the Liquor, and  
the Antimony is covered with a yellowish Crust, gentiy  
pour the Aqua Regia into another Vessel, keeping back  
the sulphureous Matter, and wash the remaining Antimony  
several times with fresh Water, till it acquires no Acidity ;  
then pour upon the Antimony Oil of Tartar Ter *deliquium,*to the Height of two Fingers; place the Vessel in warm  
Sand, find increase the Fine till the Liquor boils ; pour out.  
this Tincture, and add new Oil of Tartar, proceeding as  
hefore. To these Tinctures or Solutions, while warm,  
add distilled Vinegar, till the Effervescence ceases. Place  
the Vestel again on warm Sand, and a Powder will sail to  
the Bottom, which separate bya Filtre, and dry upon  
brown Paper. This Sulphur, or rather *Lac Sulphuris  
Antimonii, Tachenius* imagines, is the same that *Helrnont*hints at in some obscure Expressions, where he says, the  
true Sulphur of Antimony Very much resembles common  
Sulphur, only its Colour has more of a greenish Cast ; with  
this Sulphur he prepares a Cinnabar, which, when six  
times sublimed, and infused in Wine, produces most fur-  
prising Effects; and this Cinnabar seems , to he the same  
with the *McrcuriuslDiapboreticus,* which he mentions in  
the same Treatise. *Tachenius* also affirms, that he found  
by Experience this Sulphur to he an admirable Remedy in  
the Tympany : Of the same he prepares a Liniment, with  
two Simples not named, which, rubbed upon the Spine,  
Wrists, and Soles of the Feet, infallibly cures Tertian  
Agues. *Angelus Sala* likewise reckons this Sulphur a  
powerful Aperient, Difcutient, and Sudorific. *Edin-  
burgh Med. Efsi Vol.* I.

The *Sulphur of Antimony,* is prepared different ways ; and,  
on account of Its excellent Qualities, has been called by  
different Names. - It is termed *Sulphur,* because it is inflam-  
mable like common Sulphur, and emits a foetid Smell ; bur it  
differs from it in this, that it always retains some reguline Parts,  
and is therefore specifically heavier. It is called *Golden Sulphur,*because Chymists have imagined, that it came near the Nature  
of the Sulphur of Gold; and because, when mixed with Silver  
over the Fire, it gives it a gold Colour. Chymists likewise  
name it *Sulphur Embryonatum,* procured from the Saturnine  
*Magnesia,* believing it to contain some Portion of the Sulphur  
of Gold gut from Antimony, which they term *Magnesia Sa.,  
turnina. Glaubcr* calis it *Panacea,* and the *universally purging  
Sulphur*; and it was given, for a long time., by *Cardilucius,* a  
famous *German* Chyntist, by the Name of the *Lesser Centaury.*It is likewise the same Powder which has lately been fo much  
in Vogue, bv the Name of *Ttrrnet Mineral.* Or *PoVider of the*

*Carthusians,* because it wasfirst disguised under that Title by the  
Monks of that Order; and It in the shine with *Russells* Powder,  
which has been so famous in *England.* All the vVays.of pre-  
paring this Golden Sulphur may he reduced to two. The first  
and most common is, by first dissolving 'the' Sulphur of Anti-  
mony by some alcaline Salt, and then precipitating it by distil-  
led Vinegar, or some other Acid. The second is, by precipi-  
taring the same Sulphur of Antimony, at first, by an Alcah,  
without the Help of an Acid.

**PROCESS VIn. ,***'.Crocus of* **ANTIMONY.**

Take os Antimony and Nitre, equal Parts, and reduce them  
to a very fine Powder. Set an iron ladle on the Fine, and  
make it almost red-hot, and throw inth it a littie os this  
“ Powder, winch will take Fine like Gun-powder. When  
all is grown quiet, throw in .a littie more, which will go  
off like the former, and so proceed till the whole Mixture  
is deflagrated. YoiI will then have a Matter of a brown  
- yellowish Colour, the Bottom of which will somewhat  
resemble Glass, upon which there will he some lighter  
Scoriae. Reduce the Whole to a fine Powder, and then  
.. wash it with het Water, till the Calx, of the Colour just  
mentioned, remains insipid. ‘ The Waters this is washed  
. with, bring filtred, are pellucid-; but, upon dropping a  
r: little Vinegar into them, become of an orange Colour,  
and let fall a fine Powder, very much like that of the pre-

- Ceding Process, but more subtil

: RE MARKS.

The Sulphur, Nitre, and black Antimony, make a sort of Gun-  
powder, which therefore goes off in the same manner: The  
metalline Part is by thin means calcined into Glass and Scoriae,  
. both which are violently emetic; and being infused in Wine,  
" will give that the same Quality. The Change of the Colour  
' is here remarkable. If this Operation is . performed in a large  
. Crucible, with an intense Fire, and a large Quantity os In-  
gredients', and the Matter is then made to stow, you will

' have an extemporaneous Glass at the Bottom; which, being  
. separated from the Scoriae, has the same medicinal Effects  
. with the laborious Preparation of Process' 3. ss

*Gsoessfrofs* Method of making the *CrocatiMetallorum* is exactly  
the same. \_ τι . . τ ί

This is called also *Terra Sancta Rulandi.* When given in  
Substance,' froth two to five Grains, It is a strong Emetic,  
and from it is prepared the Emetic Wine, by infusing it to  
i the Quantity of three Ounces in three Pints Of White or

*Spanish* Wine, Tor two or three Days, shaking the Veffeis  
i often. The chinr Wine swiinrning at. the Top is given for a  
” Vomit, from one to four Ounces. ' *Geoflfiroy.*

I shall give an Account os another Sulphur os Antimony, under  
'. the Tide of *Kernes Mineral, or Powder os. the Carthusians,*in the latter Part of these Processes upon Antimony.

. P.RGCESsslX.

*A milderiEmetic of* **ANTIMONY.**

' Mix one Part of. Powder os Antimony with two of Nitre, -  
. t and throw them by a little at a rime into a red-het Cruci-

an ble, and yon will have the spine Detonation as in Pro-  
*- cess 8.* hut‘the Matter will he white, which, bring  
throughly washed, gives youth white insipid Calk of Anti-

. mony. The Water with which it is washed, when it is  
r filtred, is salt, 's . V ) ' .

E- . R E M A R K'6. μα

The Proportion of the Nitre here being increased, produces an-  
other Colour, though the Deflagration happens in the same  
*s* InamleI. This-Calk is much milder than the preceding,  
often exciting Nausea's only, and- flight Vomitings, with δ  
Discharge of a good deal os Saliva,- and a thick Urine front

. the stimulated Viscera. The lixivium of this, upon drop-  
. ping in of Vinegar precipitates a white Calx, nearly of the  
-same Virtues.- . . . . ...Γ-. . 4.

**P ROCESS ἱΧ.**

*A Diaphoretic nitrated* **ANTIMONY..**

Take of Antimony, one Part; os Nitre, three Paris; reduce,  
them to Powder, throw a littie of/the Mixture into a red-  
.' het Crucible, and it will deflagrate as hesore. - Proceed in

this manner till you have used all your Powder, raking a  
\* great deal of Care not to throw in any. os it till the pre-

ceding Portion is perfectly deflagrated. Keep the Matter  
in the Fine for the Space of a quarter of an Hour, the Cru-

cible ail the time Being perfectly red-hot; and then let it  
cool, and you will find in it a hard, white Mass. Take  
this out, powder it, and keep it under the Title of *Anti-  
\_ mortium Diaphoreticum Nitratum.*

RE MARKS.

If yon take half a Dram of this Medicine well prepared, it  
produces scarce any sensible Alteration, except that on ac-  
count of the fixing Nitre which adheres to it, it moderately  
opens, and hence in acute Distempers does some Service.  
The Chymists call it a Diaphoretic, and think that the arse-  
nical Poison of the Antimony is fix’d by means of the greater  
Quantity of Nitre. But in the Antimony there .was at first  
nothing emetic, the’ you took st without any Preparation,  
or the Addition Of any Nitre; and yet an equal Quantity of  
Nitre gave it an emetic Quality. AS we may conclude safely  
therefore from Experiments, let us not give too much into  
Hypotheses. Let the Followers of *Basil Valentine* here learn,  
tint there is no Need of so much Caution to free this Din-  
phoretic Antimony nicely from its fixing Nitre; for it nei-  
ther produces Anxieties, Nauseas, or Vomiting, but stimu-  
lates kindly and safely. There is more to he feared from  
the Calx after washing..

δ᾽δ᾽. PROCESS XL

*The common* **DIAPHORETIC ANTIMONY,** *called* **SwEET  
ANTIMONY. . . ' , .**

Take the calcined Antimony of Process Io. reduce in. tri a  
fine Powder,- pour het Water upon it, and stir them  
about with a Stick, by which means the fixing Nitre, that  
adheres to it, will he dissolved. Let the white Calx sub-  
side, pour off the saline liquor, put on more Water, and  
ι thus render the Calx perfectly sweet, fo that there shall he  
no Nitre sensibly adhering to it; and then dry it, audit  
will he white, insipid, and heavy, and is the thing yon  
want.

-'EE .. . R E M A R k 6.. / ‘

This is called Diaphoretic, for the Reason given in the preced-  
' mg Process. But in isan inert, noxious Calx, without any  
: thing active in it, as far as one can judge by its Effects, and  
wants every thing Valuable that it had hefore. It acts only  
in a sensible manner, when It is mix'd with half as much of  
a Purgative; for then it truly quickens its Operation; as ap-  
pears by undoubted Experiments in *thePulvis Cornachini:*But otherwise I dissuade the Use of it. How furprismgly  
are' the Colours chang'd in the Antimony; by simply vary-  
ing the Proportion of the Nitre in the Calcination ? And whet  
a surprising Alteration do we find in the Strength ?

*Boerhaave,* we see, has a much better Opinion of Diaphoretic  
Antimony before the Nitre is wash'd out of it, than after-  
wards στ and in this I believe he is right. But his represent-  
ing the common *Diaphoretic Antimony as* noxious, seenism  
savour much of Whim, or Love of Contradiction; for I  
neverrnet with an Instance myself of any ill Consequences  
from the taking it, nor ever heard of any one that did.

*Geoffrofls* Character of Diaphoretic Antimony is, that it. Is an  
excellent Diaphoretic, when given inwardly in a sufficient  
Dole, resolving Obstructions, attenuating thick and Viscid  
Fluids, and fording them, either sensibly or insensibly, thro'  
the Pores of the Skin. It is prescribed with Success, in all  
' malignant Diseases, in a Pleurisy, Erysipelas, and Diseases  
- of the Skin; and it makes an Ingredient in the *Puluis cor-  
' nacheni,* and *Puluis Febrisugus* of *Marton. Vigani lenfr it*- has nd inoreWirtues than Tobacco-pipe Clay. - Ἀ'

' P R O c E s s Xn.

»- \_..η. α. . ^ ...... » ε . - -

*... Hitrkia Siibiatum.* Anfiinoniated'**Nine. \* ' '**

: Take the Waters with which the preceding. Calx was. .wash-  
χ ed, filtre them,, put the Lixivium into a clean Urinal,  
., . and exhaleto a Dryness, keeping It constantly stirring to

: the End. By this means you will have a white saline Mint-  
. ..-miter, of a singular, arid not disagreeable Taste, not like that  
. of Nitre, hut softer, which keep under the Title os Na  
*tram Stibiatutn. \_*

sthece we learn, that Nitre, by Dheonation with Antimony,  
, is: converted into a new Salt. This Sait is gently aperient,  
and in a phlogistic Disposition of the Bleed, agreeably dis-  
solves the inflammatory Density without Violence, and hap-

- pily disposes to Perspiration, gentie Sweats,- and a Discharge  
by Urine; and hence cools, and proves of Service in the  
Small-pox, Meafles, Pleurisy, and Peripneumony. Hout  
unseasonably therefore is this Water thrown away, aS being  
Os a hurtful Nature l

PROCE S S XIIL

***Ptofd Susphur of AvrsidOKY.***

' Into the siltred nitrous Liquor os Process *ii.* putsinto a Uri-  
nal, whilst hot, and very pellucid, drop some yery strong  
distilled Vinegar, and it instantly grows milky, and preci-  
pirates an exceeding white, and Very fine Powders ’ Shake  
them together, and proceed io drop in more; shake them  
again, and repeat this till the Liquor will not he affected  
by the Vinegar any longed Let the Vessel stand quiet till  
ailthe Powder is subsided to the Bottom; poor off the Li-  
quor into a clean Vestel, wash the Powder with Water till  
it is perfectly insipid, and their dry it, and you will have  
a Very white, insipid, fine Powderr winch is called *Sul-  
phur sixum Anti morti.*

-REMARKS.

in the Deflagration os the Antimony'with the Nitre, the Sul-  
phur of the former unites with the latter, as in Process 8.  
And the Sulphur, thus resolv'd and combin'd with the Nitre,  
' is dissolv'd with it in Water;' bur as soon as ever an Acid

Comes to it, it precipitates froth the Nitre, as we see here  
upon the Instillation os Vinegar, \_ and at the same time the  
Acid unites with the Nitre without any Sign of an Effer-  
Veseence. The Powder then that salis to the Bottom, being  
wash'd, is true Sulphur of Antimony. *Tachenius* extols this  
Powder taken in Vinegar, as the most powerful anti-pesti-  
IentiaI Medicine. But for rtiy port, I Confess, I think it  
I ought Io he look'd upon as an absolutely inert Colx, noxious  
on account of its Weight and indissolubility, or at least doing  
Ho manner of Good. The Vinegar, however, taken along  
'withit, I acknowledge to he particularly serviceable in the

Case mentioned. In this manner are the Chymists too apt  
’.to cry up the Preparations of their Art, particularly those  
from Antimony, and then especially when they do not pro-  
educe any sensible Effects. But that acetose, nitrous Liquor,  
that.swinis above the precipitated Powder, has the most effi-  
cacious Virtues, in acute febrile Disorders, both on account  
of the Vinegar,' and the soft Nitre, winch is now freed from  
. the inactive Sulphur: Thus, in the. Chemical Art. is the  
best Part frequently thrown away. From all these Instances  
, wo perceive, hew surprisingly Sulphur is dissolved,, lies con-  
ceal'd, . and is resuscitated in various Forms, and Various

. Colours. - . : ' ... εἴ ι -

- P R 0 C E S S XIV.

*The Distillation of* **ANTIMONY** *into, an icy Putter, and  
s ': 'i- Cinnabar. - i . '* **S**

Take of corrosive Sublimate os Mercury, two Pounds; rub  
it in a warm dry glass Mortar with a glass Pestil, till it is  
reduced to a Very fine Powder. Then take of the best  
Antimony, ope Pound, which alio powder separately Very  
fine. Mix these as nicely as possible in a glass Mortar,  
and they will grow warm, and' emit a Fume, of which  
beware with the utmost Caution. Have by you at the  
Line time a cleafi, dry, glass Retort, that will hold three  
) or four tithes as much as your Powder, which should have  
a large Neck, and he cut off so low, that the Mouth may  
*‘si he Very* wide. Dry the Powder Very well, and -then put  
τι if into the Retort made her herd dry likewise, taking care  
)„ that nothing black adheres to the Inside of the Neck.

Place the Retort thus charg’d .hi a Sand Furnace,' *so* con-  
triv'd for this Purpose, that .the Belly of the Retort may

. almost touch the Bottom of the Pot, and yet-its Neck may  
lie in a declining Position. -.This .being, done, apply a large  
Receiver, so' cutthat the Mouth, os it may exactly admit  
? the Neck' of the Retort, find cover the Retort with Sand.

Let the whole Apparatus stand finder a Chimney that. will  
carry tip the Fumes without dispersing them;’ make a little  
' si Fire, and when the Resort, is grown moderately hot; with  
' i a Paste mafleof Clay and Lime lute the Jointthen raise

your Fire yery gradually, and in the first place the Re-  
.. oeiVef will begin th he clouded; and there will he a small

Quantity of a Liquor collected in it. Carefully keep up  
your Fire in this Degree, fist nothing more os this liquid  
‘ will come oyer:- Whan this ceases, increase your Fire,  
sshnt Very Icantioirsty, tils you perceiVe apinguious Matter  
' rise into the Neck of the Retort., arid distil into the Re-  
. ; cover, coagulating whilst it pastes from one in the other ;  
ῖ keep tip this Fire th the same Height, and there will he a  
i Mute icy Matter concreted in the Neck os; the Retort.

On bom Sides os it therefore lay some live Coals, first at  
a Distance, and afterwards nearer and nearer, till the  
Neck *of* the Retort is grown as het as the Belly of it;= and  
- then the Matter will melt, and drop into the ReceiVer.

Proceed with this Degree, and then very gently increase  
It till no inore Butter rises into the Neck, and all that has  
risen, is distill’d into the ReceiVer ; then remove the Re-  
ceiver, taking all possible Care, that none os the Vapour

comes to your Lungs; and presently stopping it, set it by.  
’ Lute on another properly fitted for this Purpoie, and *in..*

crease your Fire, and you will have a Matter come off, of  
a yellow, red, blackish, and various other Colours; upon  
which raise your Fire’ to the highest Degree, and at fast  
place Fine upon the Sand at the Top of the Retort, that  
the Sand may be almost red-hot, and so leave them for the

’ Sheree' of two Hours. Let the Whole spontaneously cool,  
and then remove the Receiver, in which you will have  
.. some Quantity of crude Mercury, and a Butter rendered  
impure by the sulphureous Fumes os the Sulphur os the

C Antimony. In the Neck of the Retort too you will find  
a Matter of various Colours made up of the Mercury,  
Sulphur, and Botter; and upon breaking the Retort, there  
will he some antiinonial Feeces'at the Bottom; but at the  
Beginning os the Neck, you will find a dense, herd; opake,  
and Very heavy' Mass, the Surface os which, that is conti-

-. -guous with the. Glass, will have a shining Appearance,  
. whilst the other is rough, and which, being reduced so  
sa Powder, is true Cinnabar of Antimony, and is sufficiently  
. costly. In this Process there is need os a great deal of  
: Patience and Cantion; -for if the Fumes should infinuate  
.. themselves through the cracked Glass, or Lute, or any

other way, and be received into the Lungs, by their  
- caustic Quality, they would prove fatal.

REMARKS.

Ifwe consider the Nature of Antimony, and of Mercury Subli-  
mate, the Chymical Ratio of this Process is easily understood.  
Whilst the Fire acts on the Sublimate, the Aqua Regia that is  
in it, unites itself with the mercurial, metallic, regulinePart  
of the Antimony; and thus leaving the Mercury, with  
which it was combined before, that returns to its original  
Form, and runs at the Bottom of the Retort : Hence the  
Regulus is sublimed with the Spirit of Salt, and becomes a  
volatile Vitriol of Antimony, call'd a Butter, consisting of  
an exceeding pure Regulus, and Spirit of Sea-salt, combined  
together. When - these are separated and sublimed, then

- the Sulphur os the Antimony discharged from the reguline  
Part, and the crude Mercury freed from its Acid, remain at  
the Bottom os the Retort, and by the Action os the Fire  
become united together, and sublime into Cinnabar. This  
Butter os Antimony th the most speedy Caustic we are ac-  
quainted with, producing an Eschar the soonest os any thing,  
which separates in a Very short time; for the most part, the  
same Day it is made. It easily dissolves with the Moisture  
of the Air, and then it loses its Pelincidity, grows white,

- and precipitates a Very white Powder. It dissolves with Heat,'  
\* but in the Cold returns again to its icy Form'. The Va-  
riety os Colours, in this Process, arises from- the Sulphur of  
Antimony. Is instead os crude Antimony you take the very

. pure Regulus os Process 6. and proceed exactly in the feme  
manner, you obtain only a Buttes, and a Mercury, both  
exceedingly pure, because then there sqno Sulphur; and the  
Acid being intirely received into the Regulus, the Mercury  
.returns in its greatest Purity. Here then we see what a sin-.  
guiar Effect the Spirit os Salt; which adhered to the Subli-  
mate, has, whilst it sublimes the fix'd Regulus of Antimony  
in a Sand Heat: But it has the Very same upon all metalline  
Bedies, Gold itself not excepted; How wonderful a Body  
then is Sea-salt ? The Chyrnist certainly can never too much  
employ his Art upon it, aS he will always discover something  
that will make hint Amends for his Trouble.

*Geoffrey* says, the *Cinnabar,* which sticks in the Neck of the  
. Retort, is powdered, mixed with its own *Caput Mortuum,*Tthen sublimed by a gentie Fire. Tt is of a dark-red Colour,  
and is recommended in all Diseases of the Head, especially  
in Epilepsies. It is likewise used in Venereal Cases, and ‘  
ί operates by Sweat. The Dose is from six to fifteen Grains.

Cinnabar of Antimony may also he extracted from aarirtionisl  
Mixtures, and smut several other Preparations os Mercury,  
. besides the corrosive Sublimate; and among those there is not  
" one from which we may extract so much, or with so great  
.Ease, as from an' equal Mixture of Crude Antimony, and  
.ZEthiopS Mineral, ‘ prepared by Calcination ; because this

. Preparation of Mercury is, as it were, a Cinnabar halfmade,  
. which readily unites itself, so the Sulphur of Antimony, and  
which rises within to.the Neck of the Retort: For this Ope-

. ration ’tis necefiaryi that the Neck of the Retort he const-  
durably long. . ....

Cinnabar *os* Antimony is generally much mote esteemed as a  
Medicine, than the common Cinnabar. Yet after examin-  
ing the Effects of both, upon many Occasions, I have found

Ythem alike, only shut of the Antimony, when exhibited in  
. a huge Dose, \_ sometimes excites a *Nausea.* Care mint he  
- taken, that a Drop of the Butter of Antimony bar not sallen  
I upon this Cinnabar, during the Operation; for in that Case,  
- st may become somewhat emetic.

Cinnabars often produce good Effects in such Disorders of the  
Brain, as are mused by a gross and corrupted Phlegm, which

intercepts the Motions of the Spirits; because these Modi-  
fines, mounting to the Brain in Consequence of their volatile  
Nature, attenuate and colliquate the pituitous Humour,  
winch afterwards finds proper ways for dissipating itself. But  
these Remedies must be exhibited in fmail Doses; for the  
excessive Colliquation os the Humours occasioned by them,  
either when administered in large Doses, or too often, fre-  
- qnentiy brings on more terrible Disorders than those they  
were design'd to remove.

Cinnabars are also used in Asthmas ; and in these Cases they  
act not only by their Sulphur, which is wall calculated for  
promoting Respiration, hut also by the Mercury contained  
in them, which Contributing to rarefy and\* dissolve the Ob-  
T structions of the Lungs and Diaphragm, restores m the Fibres  
of these Parts a Power of dilating and extending themselves.  
*Lemery Cours de Cbiinie.*

PROCESS XV.

*The Difl illation of Butter of* **ANTIMONY** *into a Liquid Oil.*

Take the Butter of Antimony of the preceding Process broken  
to Pieces with some glass instrument, the Neck of a Phial,  
for Instance, and put it into a clean glass Retort, taking  
Care that it does not diflolve in the Air, nor offend you  
with itsVapour. With a gentie Fire, gradually increased,  
draw it off into a dry clean Receiver, raising it till all the  
Putter is come over, which at last will require a Heat  
considerably intense, and you will have it nearly in the  
Form of a liquid Oil of Antimony. If yon distil this Oil'  
a third time, it will still hecome more limpid; and if it is  
rightly secured in a close Vessel, will continue in this Con-  
dition. May not this, which is a pretty surprising Experi-  
ment, illustrate some obscure Places in *Paracelsus ?*

R E MAR K *S.*

This beautiful Experiment gives us a great Insight into the Me-  
thod os rendering Metals Volatile, and converting them into  
the true Form of a liquid Oil, and discovers to us the won-  
derful Power *of Sea* halt in giving Volatility to Metals, and  
its surprising Quality, whilst it remains united with Anti-  
: rnony; for so long it is extremely poisonous, sending forth  
A truly arsenical Vapour; and yet, when it is separated from  
the Antimony again, it becomes quite innocent. -Is there  
. not some room therefore to suspect, that there lies hid here  
something of an alcahestical Virtue? Certainly it renders all  
Metals distillable in a .Retort, without any Alteration in  
. their Weight, and is recovered from them again almost in  
its full Power. This Oil is extremely caustic, and supplies  
skilful Surgeons with the most speedy Escharotic. This Pro-  
cess has been ranked amongst the prosoundest Arcana. If  
you have a mind therefore to try it, whatever you do, he  
sure take Care of the Fumes: I knew a Very worthy and  
' famous Man, to whem they proved fetal. Again therefore  
let me caution you to beware of them.

j PROCESS XVI.

*Mercurius Vitae of***ANTIM0NY,** *and* **Hr REGULUS,** *otherwise  
. called* **PULVIS ALGAROTH,** *from* **Victorius Algaroth,** *its  
Inventor.*

Put some Water in a clean Clear Glass, into which let sell  
one Drop of the Oil of Antimony of the preceding Pro-  
cess, malted and depurated. You will observe the Very  
Instant it comes to the Water, from pellucid, it becomes  
white, and sails to the Bottom. Proceed to drop in the Oil,.  
till a Quantity of it equal to One-fourth of the Water, is  
. instilled into it, and it is all converted into an exceeding  
heavy white Powder, which is collected at the Bottom.  
Stir them well together with a glass Red, so as to mix  
them aS throughly as is possible ; and when they have stood  
quiet for some time, there is a-Very limpid acid Liquor  
swimming at the Top, which gently pour off Upon the  
Powder then put more Water, and when by this means  
you have washed it till it is perfectly insipid, dry it with a  
gentie Fire, and you have.a white, insipid, heavy Powder.

RE M Α1Χ&;

Thus we fee, that the Acid of Sea Salt adheres to the Anti-  
mony so long only as it continues exceedingly strong, re-  
- ceding from it aS soon as ever it comes to he lowered with  
the least Quantity of Water, and then is attracted into the  
Water. This Powder, given to two or three Grains, is a  
.- violent Emetic; and from the fetal Effects it has sometimes '  
- had, has been called *Mercurius Mortis.* If it is laid upon  
. Glass, and exposed for a good while to a -gentie Fire, being  
; kept constantly starring all the time. It loses in Strength, and  
becomes less active, and then is thought by many Pedons to  
. he the *Arcanum* of *Riuertus.* This Powder contains nothing  
. of Mercury in it, whatever *Billichius* says to the Contrary  
in his *Paradsxee Chymsatncm,* but the purest Regulus of An-  
timony. I took eleven Ounces of this *Mercurius Vitae,* pre-^

pared with my own Hands, and, putting it in a strong large  
Crucible, placed it in a Wind Furnace; and by this means  
the Powder was melted as soon as eves the Crucible came to  
he throughly red-hot. When it was perfectly in Fusion, I  
poured it out into a melting Cone, and had ten Ounces of  
a shining Regulus, but a littie upon the greyish. Consisting  
of SpictUa surprisingly disposed amongst each other.

P R O C E S S XVn.

*Philoscpisec Spirit of* **VITRIOL.**

- Take of the limpid acid Liquor of the preceding Process,  
siltreis, and inspissate it to one half, and yon will have  
**the** *Spiritus Vitriols Philosophicus.*

RE M A RKS.

This very limpid, and gratefully acid Liquor, has the Taste of  
Spirit of Sea Salt, , and has the Very same Effect in every  
Chymical and Medicinal Operation. Nor is there any thing  
in the least emetic in it, hut it is an exceeding pure Spirit of

\* Sea Salt, which through all the Operations it has undergone,  
with the Sublimate of Mercury, the Antimony, its Butter,  
Oil, and the Water, has still retained its proper Nature, nor  
is so much as tainted by any Admixture, but has an admira-  
ble salutary Acidity. It is improperly therefore called a Vi.

*\* triolic Liquor*; for it contains nothing at all of Vitriol; bnt  
with the alcaline Salt of Tartar, it regenerates Sea Salt. AS  
I am a great Admirer of Sea Salt, on account of its sur-  
prising Effects in Chymical Operations, I had a mind m ex-  
amine into the Nature of this Preduction of it.. To this

' Purpose I took a large Quantity of this Liquor, and distilled  
it in a tall, clean, glass Cucurbit, and the Liquor came off  
exceedingly pure, nor left any thing at all at the Bottom.  
Hence therefore I learned, that the Water, by simple Affu-  
sion, in an Instant extracted the Spirit of Salt, in such a  
manner, from the Butter of Antimony, that nothing at all  
os the Antimony remained united withit, though it before

- rose out of the Retort combined with the Regulus, in form  
of a Butter. I then distilled all the Liquor again in a tall  
Cucurbit, and afterwards once more with a gentle Fire of  
one. hundred Degrees, and there then Came off a pure Wa-  
ter, which had not the least Taste of an Acid: This Degree

’ Of Heat I kept up, till nothing more would rise. The re-  
maining liquor I urged, with a Fire a very littie stronger, ***so***that thererose a Liquor that was somewhat acidish; I care-  
fully separated what was thus elevated, and kept it under the  
Title of *An aeidifi Phlegm of Philosophic Spirit of Vitriol ;*This is of considerable Service, where acidish Medicines are.  
wanted. The Liquor that was left, I distilled with a Cu-  
curbit, and I found it a Very acid, limpid, pinguious Spirit  
of Sea Salt, that fum’d a lithe. Thug then I learned the  
wonderful Nature of this Salt, its easy Combination, and  
easy Separation. - \_ - he

PROCESS XVIH.

**\_ - Van Helmonfr** *Flowers of* **ANTIMONY.**

I. Take os Antimony, dissolved in Aqua Regis, according  
to Process the first, one Pound; put It into a low, open,  
glass Vessel, and expose it sor a good while to a gentle  
Fire, keeping it continually stirring with a glass Red, till  
the Matter is become Very dry; than ma glass Mortar,  
and with- a glass Pestil, reduce it to a Very fine Powder ;  
to which add as much of the driest Sal Ammoniac, as there  
is of the Calx, and then rub them together,' the longer the  
better, that they may. be mixed as intimately as is possible.  
Put this Mixture into a. low glass Cucurbit with a wide  
Mouth; fit on a very large clean Alembic, and lute the  
Joint with a Lute made of Lin-seed Hower. Pisce the  
Cucurbit in a Sand Furnace, in such a manner as to stand  
a' littie leaning forwards, that the Water: in. the' Subiima-  
tion may easily pass out of the Alembic into .the Receiver.  
Then cover the Cucurbit with Sand up to the Rim of the  
Alembic, raise a gentie Fire, and there will come over a  
limpid, acid Water, which, by increasing your Fire a lit-  
tle, will he all expell'd. . Gently raise'.your. Fine, and  
something white will begin to rife, upon which keep it up  
to such a Degree, that yotr can just bear your Hand upon  
the Head; and then Substances of’all kinds of Colours  
wist ascend into the Alembic. Continue thd Fire in- this  
Degree, for the Space of eight Hours, and :you will he  
entertained with the Beauty of the Appearance. - Let the  
Whele cool, very gently take out the Cucurbit, clean

\* both this and the Alembic from the external Dirt, and  
then carefully remove the Head, taking care of the first  
Vapour, and you will find almost all the Antimony sub-  
limed with the Sal Ammoniac into a variegated Matter.  
Take this out presently, and put it inm a dry, het, glass  
Vestel, under the Tide of *Helmonfs Salt Flrut er s of An-  
timony.* These, if they are taken in the - smallest Quan-  
tityj arc a very powerful Emetic, Ar the Bottom you

will find something that may be sublimed with fresh Sal  
7’ '‘Ammoniac. .: . \* . .. ...so- - ... ... ..

‘T2. Put these Flowers, into Water, and stir them well about,  
.'ana the Water will grow milky. Let it stand quiet, and  
;\_.f. settle, and at Top there will swim 4 saline, ammoniacal

Liquor, which pour off. Wash the Flowers in this man-  
.... . Uer .till they are quite insipid, find then dry them with a  
i ; gentle Heats and you will have a Very fine, red, insipid  
siTowder, winch is greatly emetic.. These are called *Van  
Λ. τε Nlelrrionfy fweet emetic Flouvers of Antimonys. \* Is the.Lixi-  
so. ssvia theselute. wash'd with, areimspiflated, you have a Sal

Animoniac'fit for theIaineUse again. i . ..

rSn/LssSSR.a M Ain K4 ' \ . -

^,νΜ.ι-ι ι' ........ .../ *A .. . t - - .* .. ... . ς « \* .0 ' ...a. .

INerewe have anInstance os the Mariner in which *Nara celsius*di s thought a Chynii'cal Death and Resuscitation, as he express'd  
I -.’ himself,' opened Metals, and by'this means made them exert  
, inthemselves effioacioufly in the hu man Body. Here we see  
a fixed Body become Volatile ;h and here we observe -the Pro-  
sinctinninsrall Sorts os Colours.- Thus' the black Powder os  
τι Arttimoby, OLHeadtos the Crow, heing reduced to a white  
-if Calx, becomes theNeCk os a Swan;-and afterwards acquiring  
- 2. w great Variety os beautiful Colours, is changed to the Tail  
' ssofaPeacOck 2.But it is emetic, under all these Alterations.

-ss f *zssi*' 6ss 1O Q '9 X’SSfeXIX. I so etscrapi' -  
r iiVan HeimonPs *fixed Diaphoretic Flowcrs of* **ANTIMONY.**

Take of the sweet Flowers of the preceding Process, one  
...Part ; of the purest and driest Nitre, three Parts; and  
.' rub them wellfor agood while in a glass Mortar. At the same  
ῆ. Iirne, heve aolean Crucible standing in the Fine red-het,  
into which throw a littie of this Powder, first heated, and  
ft.will deffagrate^hut very weakly. When every thing is  
δ᾽ . quiet, throw in a littie more,, and so proceed, till you have  
si si made use ds all your Powders When the Matter, in the  
'Crucible is grown cold, it will be os a white Colour, in-  
, dining to yellow.' Take this out carefully, pound it,

wash it with Water, and dry is, and you will have a fine  
white Powderi. Put this into a China Dish, pour *Alcohol*si". ' upon it, set it on fine, .and whilst it is burning, keep the  
oss*.I*'Powder continually stirring about with a Tobacco-pine,  
ss ‘When the ί*Alcohol* is burnt out, there will remain *Van .*

FfrZmoutis Dinphoretie, thirty-six Grains of which are said,  
' by promoting Sweat, to cure all intermittent, and con-  
*tinned* Fevers. : δ᾽ "si .. ί -. ' ἱ ’ .

. ’ χ ἐν . - . R E M A R K S.

Here we have air Instance of fixing a Volatile Body, for Chy-  
mieal’.Uses. This Diapherefic its Author greatly extols.  
I have made it myself, however, and tried it frequently ; but  
I could never find any such extraordinary Virtues in it, as  
hementions in his *Aurora Medicinas, written in Dutch ;*and hence I am inclined to believe, that, in other Cases like-  
' wise, he has indulged himself a littie too much in extolling  
. his own Preparations.

P R O CSSS XX.

*The Purgans Diaceltatessen os.Nuss* Helmont *with fixed Flowcrs***- - of ANTIMONY.**

Take of the fixed Diaphoretic Antimony of the preceding  
Process, -eighteen Grains ; of Resin of Scammony, sixteen  
Grains; os Cream of Tartar, seven Grains ; mix them,  
. and reduce .them to a fine Powder r Or, rake of the fixed  
Diapherefic Antimony, nine Grains; of Resin of Scam-  
mony, nine Grains ; of Cream of Tartar, three Grains ;

’ and make them into a Powder. This is the Description of  
the Purge given us by *Helmont,* which *Paracelsus* called  
the *Diaceltatessen:* The first is the greatest, the last the  
least Dose for an Adult. It must he taken without any  
Acid, and may he flopp'd by an Acid, if it operates too  
violently. It must he given in Intermittents in such a  
manner, that it may finish its Operation as nearly aS pose  
fible by the Time the Fit is expected. The Author says,  
it' always cures Quartans before the fourth Day, and  
ι proves efficacious in all intermittent, and continued Fevers,

*Auror. Medicin.* published in *Dutch, p.* I87, I88, 289.

REMARKS.

Here we have another Chymical Arcanum, under the Name of  
a *Purging Diaceltatessen,* as you may find in the *Dutch* Edi-  
tion just cited. Concerning this. *Fan Helmont* says, that it  
radically cures the Gout and Fevers, that it heals Ulcers of  
the Larynx, Bladder, and Oesophagus, and that it purges  
the Body only so long as it is not found, and no longer. See  
the *Latin* Edition, *p. γ]6.* where he says theDose is  
eight Grains; so that the Account in the *Dutch* Edition does  
not agree with this. But I am always ready to suspect, that  
this great Man, by a Subtilty of Reasoning, extended the  
Virtues of these Arcana farther than Could he fairly warrant-

ed by Experiment. These things I have prepared myself,  
and, upon making use of them, have seen very good Effects  
from them, but not such superlative ones as he insinuates.  
*Boerhaave.*

. -herortz GeoffroI. - P R O C Ε S S XXI.

Τιθδ Universal Antimonial Panacea *is prepared from the Butter*

**‘ - of ANTIMONY** *in this manner c*

Take - of Butter of Antimony, half a Pound ; Crystals of .  
Tartar, well powdered, a Pound; pour son them a Pint  
of common Water in a large Matrass; mix, and boil  
them in a Sand-heat for eight Hours ; and while the Li-  
quor is hot, drop into it a Pound.of Oil of Tartar *per  
Deliquium.* After the Effervence -is over, strain the Whole  
through Cap-paper, and evaporate it to Dryness, in a glass  
Vessel, over a flow Fired A Salt will remain at the Bot-  
tom, which is to be set in a cool Cellar,, till it runs into 4  
” :' limpid Liqtios,' which must he carefully separated from’the

Fceces. It purges gently upward and downward, being  
. given from eight to. twenty Drops, in a proper Vehicle.

- : .Jt differs from; Emetic Tartar only in running *pcr.Deli..*

*. .A estesum. - seci - ...*

P R O CE SS XXIL '

, Essmissss **EMETIC. TARTAR.**

Take Liver of Antimony, Crystals, and Cream of Tartar,  
of each equal Parts; boil them in a sufficient Quantity of  
- common Water, .for six - or eight. Hours; then strain the

Liquor, and evaporate it to Dryness. The dry Mass is  
Emetic Tartar, which Is given as a Vomit from two to  
''six Grains.. -

This is; by sar the best Emetic, that can be prepared from  
Antimony, and may be. given in any Form; and as the Doses  
*of* it are easily adjusted, they may be safety increased or dimi-  
nished in any requisite Degree, that the Physician shall, judge  
the Strength of the Patient, or Nature of the Disease, Io re-  
quire; whereas the same Quantity of the.Emetic Wine may  
be more or less emetic, according to its Acidity, or other Cir- ,  
cumstances. In making the Liver of Antimony, some add to  
the Antimony and Nine, decrepitated *Sal Ammoniac,* and thus  
make what is called -the *Opalin,. Qt Ruby^coloured Magnesia of  
Antimony,* from its red Colour, which is a much weaker Eme-  
tic than the Liver of Antimony, and does not cause Vomiting  
in Horses, and other Quadrupeds, hut only makes them fweas,  
or increases Perspiration. It is given to such Brutes from one  
to three Ounces, once every Day, for several Weeks together,  
to satten them, and cure their cutaneous Diseases, or other In-  
dispositions. . *Crocus Metallorum* is likewise used to take away  
Spots in the Eyes, and to cure Ulcers, Itchings, and *Psora* of  
the *Cornea Adnata, or Eye-lids.*

PROCESS XXIIL

**EEzoAR MINERAL.**

Antimony has neither any emetic, or cathartic Quality, (all  
its Effects heing to increase insensible Perspiration, or provoke  
Sweat) is its Sulphur he fixed by mineral Acids ; as is seen in  
the Preparation of Bezoar Mineral, winch is in this manner :

- Put into a Retort any Quantity of Butter of Antimony, and  
drop upon it Spirit of Nitre, till the Effervescence ceases. ‘

. .. Having then digested them for twelve Hours, draw off the  
Spirit in a Sand-heat. On the remaining Mass pour the  
same Quantity of fresh Spirit, and distil as before. Then  
calcine the remaining Mass in a Crucible, till it ceases to  
emit Fumes; wash the Powder in warm Water, and then  
dry it.

This Preparation is commended by *Van Helmont* in the  
Plague, and other malignant and contagious Diseases, as a most  
excellent Diaphoretic, given from half a Scruple to half a  
Dram. ’

It may be made a shorter way, by pouring four Ounces of  
*Aqua Regia* on an’Ounce of *stegulus of Antimony,* and  
digesting them for some Days in a gentle Heat, shaking  
the Vestel every now-and-then, till all the Regulus is  
turned to a Very white Powder, which is to be washed and  
edulcorated by a large Quantity of Common Water.

Various Tinctures are drawn from Antimony, and Authors  
are of various Opinions about them. . We shall give one simple,  
and one more compounded Tincture, as Specimens of the rest. .

PROCESS XXIV. '' ’ '

Take of Salt os Tartar, eight Ounces; melt it in an ignited  
Crucible; and then immediately throw into it, by Spoon-  
fuis, six Ounces of crude Antimony. Cover the Cruci-  
ble, and set the Whole be calcined in a strong Fire for half  
an Hour; afterwards throw the Mass into a Brass Mortar,  
and, as soon as it hardens, reduce it to Powder. Throw  
. - this Powder into a large Matrass, and pour upon it as

much rectified Spirit of Wine,, as will CoveI.it .to the  
Height of four Fingers Breadth. Then shipping the Vestel  
Very close, digest for several Days, till the Spirit is tinged  
with a deep-red Colour.. Afterwards filtre the Tincture,  
and keep it for Use. ....

This Tincture excites Sweat, - seldom excites a Nausea;  
.-sometimes ..purges gently, and proves diuretic. It din recom-  
mended in Hysterical Affections.and. Melancholy; to break the  
-thick.Parts ofthe jBlood,in Apoplexies and Palsies; and m.open  
'Obstructions in the Viscera, in malignant Fevers. The Dose  
is from four to twenty, forty, or eVen sixty Drops, in a proper  
Vehicle, ’ .

PROCE S S XXV.

The more compound Tincture, much celebrated by the  
Name of *Libium,* or *Tinctura Lilii Par access,* is . made from  
.Metallic Reguli, in this manner: ' ’ '-

Take of thin Copper-plates., an .Ounce; ignite them in a  
red-hot Crucible; and then throw .in upon them half an  
Ounce of powdered Martial Regulus of Antimony; and,  
the Whole being presently mdted, add Four .Ounces of  
Tin, stirring the Mass now-and-then with an iron. Red ;  
and when it Js in perfect Fusion, .throw it into a well-  
greased Cone, and it will, soon harden into a reguline me-  
tallic Mass. This Mass, bring reduced to Powder, is to  
he mixed with a Pound and half of: Nitre, and half an  
Ounce of powdered Charcoal. : Throw this Mixture by  
Spoonfuls into a red-het Crucible; and after each Pro-  
jection, coyer , the. Crucible, till the Fnlmination is over.

. Calcine the Whole in.a very strong Fine, for twoor three  
Hours, stirring it at times with an iron .Spatula. Then  
. pour it into a brass or iron Mortar,, and, before, it .has  
time to cool, powder it .well, and immediately throw .it  
into a proper Matrass, and pour upon it as much Spiritof  
Wine, as will stand four Fingers Breadth aboveiit. Di-  
gest in a Sand-heat for fifteen Days, and the Tincture  
will be what is called *Tinctura Lilii,* or rather. *Tinctura  
Metallorum,* which is both fudorific and diuretic; given  
from ten to an hundred Drops, in a Convenient Vehicle,

It is much commended in malignant Fevers, Apoplexy, palsy.  
Scab, Rheumatism, Scurvy, Dropsy, and .a Suppression of the  
-Menses. 2. . \_ si-

PROCESS XXVI.

. From *tsm. Martial Regulus* of Antimony, the Silver Flowers,  
Lnown by the Name of *Antirnonial Snow,* are prepared in this  
«tanner:' .. . .

Take of the *Martial Regulus,* a Pound; put it into a largai  
' earthen Pot, placed in 'the midst of burning Charcoal :  
Let a Cover be perforated in the Middle, and so placed, as  
that there shay be the Breadth of ;two Fingers between it  
and the reguline Powder; and place another Cover over  
the Mouth of‘the Pot. Give a very strong Degree os  
’ ’ Fine for an Hour, till the Regulus is perfectly melted.

Then, the Vessels being suffered to cool, -the Silver Flow-  
ers are found in Farm of small *Spicula,* in the void Space  
between the first Cover and the Regulus.

. These Flowers cause a Diaphoresis and Sweat, and are there-  
fore prescribed in malignant Fevers, and other Diseases where a  
Diaphoresis is required. They often Cure intermitting Fevers,  
given from ten to forty Grains, a littie before the Fit.

P RO C E S S XXVIL

. On the Iqth of *December* I7J00. Mr. *Charas* laid the fol-  
lowing Method of drawing an acid Liquor from Antimony he-  
fore the Academy: ...

He reduces the Mineral Antimony to a Powder, mixes it  
with three times the Quantity os common Sand, and  
distiis it, by a large Fire, from a Retort, into a capacinuS  
Receiver half full of River-water, which he afterwards  
rectifies by a second Distillation. It often happens, That  
Antimony in this Process yields an acid Liquor, and often  
none at all. Mr. *Cheras* maintains, that the Success of  
the Process depends upon the Application of the precise  
Degrees of Fine proper for this Operation; and that,when  
these very Degrees are applied, the Experiment must  
neceflinilyhold:

- This Process is described in a Treatise of Antimony, written  
*by "John Agricola,* and printed at *Leipsic* I639. I have often  
tried this Experiment, hut .1 can't say, that’s have found Mr.  
*Charas\* s* Assertion true in Its whole Extent. . Certain it is, that  
in this Process an Acid is produced; but this Acid is by no  
means yielded by the Antimony, but by an Earth Of a whitish  
Colour, and a clayey Nature, which is almost always found in  
Mineral Antimony, and which, by a shong Distillation, yields  
an acid Spirit, as other Clayo under the like Circumstances,  
generally doeS4 but if we take pure Mineral Antimony, with-

Ont .any Mixture Of this whitish earth. Dr even the best com-  
mon Antimony without *BnysScorior cae.* Dross, we cannot possi-  
bly extract an Acid from it, whatever Degrees of Fine are .inp-  
Tlied to in.. This Acid therefore cannurbesaidIo he I Vinegar  
ofAhtimony. .. ha . ἱ-δ᾽μά ; δ᾽

-For my own part,1 Tam .persuaded, sshat' the Acid osqAnti-  
mony does,not differfrom the. Spirit of common .Sulphury and  
as Antimony abounds withra. burning\*Sulphtir, : which' resem-  
bles the common Sulphur, I helieVe -that.the Acid yielded by  
it is nothing more than - the Spirit of that; bntnipg Sulphur, or  
common .Sulphur, contained in .the .Antimony; and that the  
reguline Part, which alone is the tnie Antimony, Contributes  
nothing to the Production of this\*Acid; -°. --1 — -

.. I do not advance., this at random, and without a sufficient  
Reason ; for, having extracted the Achhof Antimony without .  
Addition in different-Maimers, and -with uncommon Pains, T  
hay eemployedit in severalProcesses ; Jbutedways found,; that it  
here n 'Perfect Resemblance *to* the Spirit osedommoniSulphur;  
:thatis,yt.produced no Effect hut -what was -produced .predisely  
-in the same manner, by the Spirit offiulphur.) S . \_.sus c

-One of the Methods J used to. extraict‘‘this inAcid,. aSiasifol-  
sows :T reduced the 'Antimony tO.a.finaUssPowdet; Ti pnt it  
into an unvarnished fiat.earthen Pan, edbout asFoot inDiaine-  
.ter; TcoVered. this Pan with.an earthen..Pot; without a Bottom.  
I.pshcedjthree .AJudelS .upon .this.earthen;pot, inthcovereththe  
Mouth of the uppermost .witha .large ginss Bell, the Edges of  
which were supported -about, three or fourDines above a Re-  
servoir -os -warm Watered which by Its fiteams ^moisten'd/the.  
intenial Side Of the Pell.; and the Water, .winch ran down  
*from* its Sides, feflhackagain into theReservoir.. T." '

*Ί* -had made a Hole,about a,Finger'S Breadth in Diameter,,  
about theMiddle ofthe earthen Pot, .through which I had pass’d  
the Stalk os an iron fipooD, in order tostir the Antimony under  
the Bell, just as when one Calcines Antimony, in order to: trans-  
form it into Glass. By.this means J hath Flowers os Antimony  
in the AludelS, 4 small .Quantity os *Add -* in the Reservoir of  
-Water under the glass Bell, and. calcined Antimony in the Pan  
'under the earthen Pot. ' ...” ::’su--.-

In this Process, a small -Quantity of Add is indeed drawn,  
hutOne may be sure of its bring unmix'd. Tt also Very often  
happens, even when this Method is Follow'd,' that no Acid at  
all is yielded. But this depends, first, upon the Accuracy.of the  
Chymist; secondly, and principally, tiponthe Temperature of  
-the Ain, .and the State of the Weather, at the Time the Pro-  
cess is carrying on. The colder and monster the Air is, the  
greater Quantity of Acid is yielded ; but when it is hut and dry,  
none at all can he obtained. Upon the Whole, -the Chymist:  
must follow all the Circumstances and Directions necessary to be  
observed in extracting the Spirit Of Sulphur *seer Campanam,* and  
take it for granted, that this process is still more difficult than  
that which yields the Spirit of common Sulphur without Ad-  
dition. *Mem. de st Acad. Rayale* I700. *by Mr. Hombcrg.*

PROCESS XXVHL

**KERMES MINERAL, or PULVIS CARTHUSIANORUM,***Poudre des Chartreuse.*

Take of Antimony, four Pounds; Solution of fixed Nitre,  
one Pound; Rain-water, three Pounds; and boil them sor  
two Hours. Then the boiling Decoction is pasted through  
Cap-paper, and set in a quiet Place for twenty-sour  
Hours, till a yellowish, or Saffron-coloured Powder sinks  
to the Bottom of the Vestel, the Liquor remaining clear.  
This Liquor being poured off by Inclination, the Powder  
is first washed by frequent Affusions of warm Water,

. till it is deprived of all its Salts; and then about four  
Ounces of Spirit Of Wine are burnt upon it, and it is  
1 afterwards dried, and kept for Use..

This Powder is looked upon as a kind of *Panacea,* or uni-  
versal Remedy. It sometimes excites Vomiting, especially  
when it meets with any Acid in the Stomach, and is some-  
times cathartic, diaphoretic, and sudorific, according as it is  
determined by the Disposition of the Patient to act upon any’  
one Hutnout more than ou another. It is given from one to  
sour Grains, Or sometimes, when It is designed only to attenu-  
ate and divide any Viscidities in the Fluids, in the Quantity of  
half a Grain, repeated every three, four, or *βχ Hours, in*acute Fevers, where there is 4 great Crudity and Spissitude of  
the Humours, it is given *in* small Doses with Success. It  
changes the crude and serous Evacuations-by Stool, into a more  
-bilious Consistence, by attenuating the viscid .Bile, and sodis-  
pofing it to pass off by Stool. It is often given with Success  
in the Beginning of the Small-pox, and MeafleS, when they  
are apprehended to he of a bad Kind, at small Doses mixed  
with Bezoardic Powders, or Absorbents, such aS Crabs-eyes,  
red Coral, Pearl, Egg-shells, Crabs-claws, and the like; for  
thus it excites a Spiting and Diaphoresis, removes Anxieties,  
Corrects the Lympha, and coagulated Serum, and raises such  
an Effervescence in the Blond as tends to purify it. *Glauber*Confirms these Virtues by the Examples of seven Children in  
the Smali-pex. *Frederic Hoffman* commends the Ufe os this

-Powder in stubborn autumnal Agues, - because -it powerfully  
opens Obstructions,: particularly of the Liver, by which these  
rFevcrs are- produced, -especially when-taken in the-Quantity of  
αGrain, mixed with -detergent.anti-febrile Salts;-siich as the  
brdt of Wormwood, the febrisugous Salt of *Sylvius,* vitrioiated  
-Tartar, and the-likei - hyhviniir-ordered it in the Quantity of  
bah' a Grain, ora Grain, three or four times a-Day, in the  
intermitting Fevers of -Children; -and commends it very much  
tin 'corrccting-the Acrimonyof rhe *Serum, -* and especially that of  
-Tears, which.give Pains in the Eyes,-and produce very bed  
Ophthalmias. The fame Author In entions - a Woman labour-  
ing under scorbutic Symptoms and Deflexions of so acrid a  
Kindtat to corrode hevLungssond-bringon a Spitting of Blood,  
who, by using this Sulphur of Anurnony in very small Quanti-  
tieSj. correcled the Acrimony, and -steamed the Motion, of this  
herum j and thereby prevented’the Growth of-a Difeafe, which  
must otherwise have been of-very. fatal -Consequence. *Hioffnian  
suss,* lit is a most effectind Remedy in such Chronical Diseases  
as arise from .long Obstructions of the-Viscera. \*In.a Dropsy,  
.for Instance, -it is very properlymixed with Filings or Crocus  
of Steel and Nitre ; in Epilepsies, with all the Cinnabars., in  
ithe Scurvy, .with -the *Arcanum Duplicatum,* sin Dysenteries,  
{with-the *Confectio'de Hyacinthse,* .in .a Dyfury, or Complaints  
jof.the Stone, with'white Nettle,-or’Pellitory-water and even ,  
jo Pleurisies andTeripneumonias, the frequently gives it, in the  
Quantity of three or four Grains, -in a Glass of strong *Spapi/b*Wine, in Carduus-water, in an Infusion of'red Poppies, or  
in the Juice-of Dandelion, or Borage. *Junker* observes, that  
this Powder-has in many Patients suspended, in one Moment,  
the.Effects of a suffocating Catarrh, sometimes byiproduang a  
gentle Vomiting, sometimes by Sweating, and sometimes with-  
out any sensible Evacuation; and the..advises it th he mined in  
these Cases with a-certaindigestive-Salt. It may be given very  
advantageousiy to-cactiectic Giris, in theQuantity of a Grain,  
inixed in ten Grains of *Crocus Martis Aperieris,* -and of the  
*-Arcanum -Duplicatum,* ithe Dose-being-repeated twice a Day.  
This Powder naayhe given either alone, or mixed with a lit-  
tle Sugar, and diluted with Wine, or Water, or any other proper  
, Liquor. It is likewise sometimes given with Oil of sweet Al-  
mondsporin Conserve of Violets,Borage, *etc.* inform of aBolus.

It is however to be carefully observed, that this Powder is  
hist-to be given till the Quantity of Blood has -been lessened,  
and all the Fluids sufficiently diluted and attenuated; for, as by  
the Use of .if the Blond is very suddenly rarefy’d, and put into  
a kind of Effervescence if the Vessels are before fuss they  
asust he still more distended, by theincreafed Heat and Motion  
of the Blond and other Fluids, -and hurtful Congestions may  
he form’d in the Viscera. It ought therefore never to he gnien,  
Dll the Dangers from a Plethora are taken off, and sill the Hu-  
mours have been rendered fluid his great Quantities of Diluents  
often repeated. ..

. The *Lixivium* in which Antimony has been boiled, passed  
through Cap-paper, is recommended by some in Scabs, and  
other Dsseafes of the Skin.

: The Fames which arife from ignited Antimony, may be col-  
suited in white, yellow, and red Flowers, if proper Vessels  
are made usio of, and, by adding powdered Glafs, Sal Ammo-  
niac, or Nitre, that they may rife in greater Quantities ; and  
these Flowers heing edulcorated b.y frequent Lotions, are erne-  
tin, cathartic, and sometimes sudorific, being given from two  
to twelve Grains. *Geoffrey.*

**λζβοηχ ascKERMEa MINERAL.**

In - the Year I7I4. a new Medicine appeared in *Paris,* and  
Dot only then acquired, hut still preserves, an uncommon Cha-  
ranter for its Virtues and Efficacies, Ir is called the *Carehsc-  
jion Powder,* because at that Time one *Dominic,* a Frier of the  
*Carthastan* Order, was feixed with a violent Deflexion in his  
Breast, which increasing more and more in spite of a due and  
careful Administration of all the known Medicines against that  
Disorder, seemed to threaten the Patient with certain and un-  
avoidable Death. Upon which one *Simon,* a Frier of the sems  
Order, begged, that ftnce the Patienfs Lise was despaired **of,**he might he permitted to give him a newly invented M idicine,  
which he had in bis Possession, and which at that time sutxceded  
so well, that Frier *Dominic* was soon duted of bis Disorder by  
its means, to the great Surprize of all that knew bis Cafe.  
This Remedy was before in the Hands of Mr.su *la Ligerie,*of whom the *Carthastan* frankly acknowledged he had is. But  
for want of some remarkable Cure to command the Attention  
of Mankind, and a Concurrence of such other lucky Circum.  
.stances aS are requisite in an Assair of that Nature, the Powder  
had not, in his Hands, become so famous, as it afterwards  
did in the Possession of **the** *Carthastan.* The Reputation of  
this Medicine growing pretty uhiverial, the Secret of its Com-  
position was soon discovered by some skilful Physicians, and,  
.among the rest, by Mr. *Eemery,* who confided so much in its  
. Efficacy, and was so sure of bis being in the Right, with regain  
to the Method of its Preparation, the the used it in a Case of  
great Importance, an Account of which we shall give in his  
own Words.

. . Towards the latter End of *December,* iin the Year I7i8. **the**Marquis of *Bayers* was fenced with a violent continued Finer,  
aecompany’d with terrible Paroxysms, a revere and frequent  
Cough, a Spitting of Blood, a smarting Pain of his Side, and  
a considerable Difficulty of Breathing. Nothing that Art can  
do in a Care of this Nature, was forgot; -and though all the  
Means, commonly, judged proper/ were used, heth with the  
greatest Care -and Expedition imaginable, the Patient never-  
theless, in the very.Beginning of the next Year, and upon the  
-seventh Day of-his Disorder, wasreduced to a truly deplorahie  
State: His Belly fwell’d, and became prodigiously tense; his  
Spitting was entirely suppress’d, which produced an uncommon  
Oppression, and a-Rattling of his Throat; his Pulfc became  
small, unequal and intermitting. His Reafon lest bain ; he  
-neither spoke to any one, nor made:a Reply to any one who  
-spoke to him : In-a word,-be was in just the fame Condition  
-that People on-the very Verge of Death, and in their last Mo-  
ments; use to he. I shall not here exaggerate the Matter, or  
insist upon the Importanceof some Circumstances, such as that  
the Patient was a Person of Distinction, and a Branch of the  
House of *jdachefoucault,* or that he was continually surrounded,  
duting his-Indisposition, by a Crowd of Persons of Distinction,  
-and'others who were interested in his Life and Health, and  
who can attest the Truth of the Facts I advance. Mr. *Pra-  
dignac,* the Apothecary', and Mr. *Mornblau,* the Surgeon, who  
attended the Pauent on this Occasion, can also vouch the Truth  
of what I say. In sine, tho\*-the Extremity to which the Mar-  
quis of *Bayers* was reduced, seemed to cut off all Hopes of a  
Cure, I nevertheless, in spite of unfavourable and discouraging  
Appearances, thought it incumbent upon me, heth in point of  
Duty and Prudence, to repeat my Attempts to the very last  
Period of the Patient’s Life. I therefore had recourse, upon  
this Occasion, to the *Carthustan* Powder, the »ond Effects of  
which I had formerly experienced, especiallyin Disorders of the  
Breast ; and as, of all the considerable Distempers I have known  
cured by this Powder, hone, .even that of Frier *Dominic* not  
excepted, had gone such A Length, or demanded fo spcedy  
Assistance and Relief, as this. I gave the Patient, at different  
times indced, hut very soon after each other, nine or ten  
Grains of this Powder 5 and perceiving, that it neither ope-  
rated by Vomit, Stool, nor Sweat, and that his Pulse, in the  
mean nine, became a little hetter, and his Oppression less, **I**repeated every fourth Hour, for twenty-four Hours, a Dose of  
three Grains of the same Powder, which, at the End of that  
time, produced no other Effect, then to render the Pulse a little  
better, and the Oppression a little less; and all this without  
any Evacuation either by Stool, Vomit, or Sweat. The Pa-  
tient, in the mean time, remain’d without his Reason, and  
without Spitting, and his Belly continued preternaturally tense.  
But as we afterwards continued to give him some Doses of the  
Powder, his Breast began to grow easy, by discharging a con-  
siderable Quantity of Spit, which was hard, baked as it were,  
and mixed with black coagulated Blood, and which the Patient  
expectorated for three or four Days. And as foon as this re- .  
markable Crisis came on, the Patient's Reason returned, bis  
Oppression, the Tension of his Belly, and, in a word, all the  
other Symptoms, disappear’d; and in a short tone, the Marquis  
*of Bayers* was completely cur’d. But what is particularly **re-**markable in this Cure,, is not only the Recovery of the Patient  
from fo defperate a Stato, but allo the Manner in which the Me-  
‘dicine operated, and the Quantity necessary to be successively  
given, in order to produce the Cure , and, indeed, the Patient  
took thirty-six Grains of this Powder in the Space of forty-  
eight Hours; and these thirty-fix Grains, instead of working  
by Vomit, by Stool, or hy Sweat, as the Medicine generally  
doos, when exhibited in a much smaller Dose, in Cases where  
it is attended with Success, insensibly cleared the Parts serving  
**the** Purposes of Respiration, and the Expectoration becoming,  
by that means, much more easy, the Patient sound himself, ell  
on a firdden, able to expectorate that prodigious Quantity,  
**which** remaining there sor some Days, had become dry by the  
feverish Heat of the Patient, just as if it had been exposed to  
the Influences of the Air and Sun.

This surprising Cure, perform’d upon a Person of such Di-  
stinction as the Marquis of *Bayers,* gain’d the *Carthastan*Powder fuch an high Reputation, that in short, the King pur-  
chased the Secret of its Composition from Mr. *De la Ligerie* in  
**I720.** since **wb** ichTime the Public has been well enough acquaint-  
ed with is. It is a Sulphur extracted from Antimony, by means  
of the Alcali of Nine fixed by Charcoal. It is less emotio than  
the ordinary *Golden Sulphur of Antimony,* employ’d for Purposes  
'of that Nature. It purges gently, and sometimes operates only  
by Transpiration, though its Effects are even then sufficiently  
sensible. It is principally adapted to Disorders and Indisposi-  
tions of the Breast. Mr. *De la Ligerie* did not pretend to **he**-the Inventor of this Medicine ; he openly acknowledged, that  
-he bad it of MI. *Chastenai,* to whem it bed been communi-  
cared by an Apothecary, who was Scholar to the famous *Glau-  
ber.* Thus *Glauber* should, injustice, be esteemed the origi-  
nal Inventor ; and, indeed, this Medicine is actually described

In his Writings, butsin so enigmatical a Manner, aS Cahnot  
sail to disgust People of Sense and Taste.

It is also contained in the late Mr. *Lemers.s* Treatise of An-  
timony, not that thistChymist canght the Hint, or decypher’d  
the Secret in the mysterious *Glauber*; but, as he design'd in that  
Work to discover the Qualities of Antimony, by turning it  
into all the Various Shapes imaginable, and combining it with  
all Substances from which any Effect might be expected, it  
was impossible but he must light upon a Combination so sim-  
ple and so natural. .'Tis nevertheless *certain,* that Mr. *Lior  
mersis* Process is different from that of *Glaubcr.* The Inten-  
tion is to extract the Sulphur of Antimony. *Glaubcr* extracts  
it by the Alcali of Nitre fixed by Charcoal; then, in order to  
free the Sulphur of Antimonysos that Alcali, with which it is  
impregnated, he employs Spirit of Wine, and digests it for  
some Days upon the nitrous Liquor; after which he evaporates  
the Spirit of Wine, which leaves the Sulphur of Antimony, at  
the Bottom of the Vessel, either in a liquid Form, if the Spirit  
of Wine is not totally evaporated, or in a dry one, ifit is. In  
the latter Case it is a red Powder, and is whet is cafled the *Car-  
thusian Powder.* But the deceased Mr. *Lemery* did not use the  
Spirit of Wine in his Process, fince, by only leaving his Mate-  
rials at Rest, and, aS it were, to themselves, he had the same  
Powder, which precipitates of its own accord. Mr. *de la  
LigeriPs* Method is intirely the same; and Mr. *Lemery* the  
younger has found by Experiments, that the Spirit of Wine  
is of no Use, unless for the sake of having the Medicine either  
in a dry or liquid Form ; for without the Spirit of Wine it can  
only be obtain'd in a dry Form.

Besides; in order to extract the Sulphur of Antimony, G/σιζ-  
*her* knew of nothing except the Alcali of Nitre fix'd by Char-  
acoal: But the late Mr. *Lemery* found, that every Alcali was  
proper for that Purpose. Hence *Lemery* the younger concludes,  
that as Oil of Tartar is the strongest of all fixed AlcalieS, it  
must of consequence be of all others the most proper in this  
Preparation ; and a great Number of Experiments made with  
this Very View, concur to prove his Assertion. The peculiar  
Property of this Medicine consists in its not bring too emetic.  
If its emetic Quality was as strong as that of the other Prepa-  
rations of Antimony, it would be thrown up by the Stomach  
as soon as they are, and would not have sufficient Time to  
diffuse and insinuate itself into all the small Vessels, where it  
produces its most considerable- Effect, or, at least, that Effect  
which is peculiar to itself. Now, in order to render it less  
emetic than the other Preparations of Antimony, there must  
necessarily remain in it a certain Quantity of Alcali to bind up,  
and, as it were, entangle the Sulphur. And there remains  
more or less of this Alcali in the Sulphur, or its Action is  
stronger or fainter, in proportion as the fix'd Alcali, winch  
Originally acted upon the Antimony, is stronger or weaker.  
. In fine, the late Mr. *Lemery* has not, like *Glaubcr,* made  
this red Powder an universal Medicine, but Very accurately  
determin'd its particular Uses, and the precise Cases in winch,  
'tis proper, which he learnt from Experience, and in the  
Course *of* his Practice, long before the *Carthusian* Powder was  
heard of in the World. So that if Mr. *Lemery* has not the  
Glory of being the original Inventor, he has at least an Equi-  
valent accruing from the Additions and Improvements he has  
made to this famous Medicine. *Hist, de sc Acad. R.* I 720.

*Memoir on* **EMETIC TARTAR,** *and* **KERMES MINERAL.***By Mr.* **GEOFEROY.**

The Use of emetic Tartar, when the Intention is to Vomit,  
and of *Eaermes* Mineral, when the Design is to prepare and  
dispose the Humors to a salutary Evacuation, can possibly he  
liable to no just Exceptions, if those Medicines are prescribed  
on proper Occasions, prepar'd with all the necessary Precau-  
fions, and the best Method os Preparation uniformly and uni-  
versally follow'd: But this is not the Case; for it often happens,  
that three Grains os some emetic Tartar produce Very consider-  
able Effects, whereas six or seven Grains of another emetic  
Tartar, differently prepared, shall produce no Effects at all,and  
that inConstitutions nearly alike.

The Case is the same with the *Kermes* Mineral : Three or  
four Grains of some Kinds of it excite Very saint *Nausea ;*whereas one Grain of another Sort actually Vomits, and this too  
. in Cases where we cannot ascribe this Difference of Effects to  
the greater or smaller Quantity of Acid lodg'd in the Stomach,  
er introduced into it.

This surprising Variety calis aloud for our Attention, and  
deserves to have its Causes inquired into, since 'tis a Point  
wherein the Good of Society, and the Welfare of Mankind, are  
nearly concern'd.

That I might therefore discover the Couses of thin Variety,  
I collected twelve different Parcels of different emetic Tartars,  
and a like Numher of different Preparations of *Kermes* Mine-  
rah- The Manner in which I analysed them, and the Differ,  
ences of the Substances they yielded, make Up a considerabit  
Part of this Memoir ; because these Differences will he cer.  
tain and infallible *Criteria,* or Marks by which we may knn^

the Effects so he expected from such and such an emetic Tai-  
tar, or such and such a *Kermes* Mineral, taking it for granted,  
in the mean time, that the Constitutions of the Patients are  
nearly equal I shall, at the End of the Memoir, propose a  
very simple Remedy, which may in many Coses he substituted  
in the room of the *Kcrrnes,* and that Very often with less du-  
bions Success. . v ' si \_ *- i*

Antimony, of winch ttis well known that emetic Tartar .and  
*Kermes* Mineral are two Preparations, is a Mineral compos'd of  
a small Quantity of easily Vitrifiable metallic Earth, a consider-  
able Portion of a Vitriolic Acid, and a Bitumen,-or Oil of. the -  
Earth. .

This Acid, in Conjunction with the Bitumen, forms the in-  
flammable Sulphur, which sometimes abounds so much in mine-  
ral Antimony, that some os it is frequentiy found to burn like  
common Sulphur. It is this Sulphur, united with the metallic  
Earth of Antimony, which, when this Mineral has only-on-  
dergone its Meltings for Purification, discovers, and renders ob-  
solvable, that surprising Multiplicity of Needles of which it is  
composed ; but 'tis to the vitriolic Acid, united with the Bitu-  
men, and forming the common Sulphur, - that these Needles  
are owing, and not to the oily Matter alone : For, if one  
melts Glass of Antimony with in simple Phlogistic, such as  
Charcoal, reduced into a Powder,, the Glass is revived into a  
Regulus, which is not like Antimony, adorn’d with. Needles,  
but full of littie shining Plates or Laminae. If, on the con.,  
trary, we employ common Sulphur to revive the Glass of  
Antimony, we shall find in the Crucible an Antimony adorn’d  
with Needles, like the common Antimony ; because all that  
this Mineral had lost, during its Calcination, IS by this means  
restored to it; that is, its Vitriolic Acid, and the Fat of the  
Earth, which, in Conjunction, form that common Sulphur  
which is necessary to constitute it Antimony.. .. r

That a Vitrifiable Earth is contain'd in Antimony, may .he  
prov'd from its heing so easily vitrifsid, when by Calcination  
one evaporates the Overplus of the Vitriolic Acid, and of the -  
Phlogistic which hinder'd the Continuity or Contact of . the  
constituent Parts of this metallic Earth. . - \*

I. Thus it follows, from what I have said, that this Earth,  
disjoin'd and divided by a great deal of inflammable Sulphur, is  
Antimony. - . *l ' .*

2. That some Part of the inflammable Matter heing *czinsid*off, so that no more of it may remain than what is sufficient to  
continue a metallic Form to the Antimony, in that Case, a  
Regulus is produced.

3. That if that inflammable Matter is almost intirely car-  
Iy'd off by a moderate Calcination, the metallic Earth of An-  
timony assumes the Form of Glass, when put in a melting  
Heat.

4. and lastly, That if this Calcination is carrsid on gradually,  
till the highest Degree os Fine is employ'd, we shall have a dis.  
animated or inert Calx or Earth, which will be entirely desti-  
tute of the emetic Virtues of Antimony itself, of its Regulus,  
and of its Glass.

*Some* Authors, and among the rest *Kunchel,* suppose, that  
in Antimony there is a mercurial Principle concurring with  
the Sulphur and the Vitrifiable Earth, to the Formation of this  
Mineral. This Author even describes, but in an enigmatical  
Manner, several Ways of discovering this Mercury ; but I  
dare not admit this mercurial Principle, till, by some clear and  
unexceptionable Process I have convinced myself, that there is a  
liquid Mercury in Antimony.

Upon the Authority of *kunchel,* who was an excellent Chy-  
mist, I have already begun some of these Processes, by which  
’tis said this Mercury is Obtain'd ; and if my Experiments suet.  
Ceed, they will furnish me with Materials sufficient for another  
Memoir.

At present, I only know of three secondary Principles, which.,  
discover themselves in Antimony; a vitriolic Acid like the Spirit  
of Sulphur ; a sulphureous, bituminous, or oily Substance, no  
matter which, provided, in Conjunction with the Vitriolic Actd, '  
it is capable os forming aeommon Sulphur; and, lastly, a vitn-  
stable metallic Earth.

Common Sulphur, the vitriolic Acid, and most of those oily  
Liquors with which it is capable of producing Sulphur, have no  
emetic Quality ; and the inert Calx of Antimony produces no  
Nausea.; but yet, of all these Substances combin'd together,  
a Mineral is form'd, from which a Regulus, a Glass, and other  
Preparations, may he obtain'd, which are of a Violent emetic  
Quality.

If pounded Glass of Antimony he digested in White-wine  
Vinegar, till the Vinegar is so fully saturated as tn receive no  
more Tincture from it ; if this Powder is again melted, so as  
to Vitrify ; if after this it is pounded afresh, and digested in  
fresh White-wine Vinegar ; and if this Operation is repeated  
several times, to a fourth or fifth Vitrification, the Glass will  
in this Case he black, scarce transparent, and entirely desti-  
tute of an emetic Quality, tho' the two or three first have A  
considerable one.

.. All these Vinegars are emetic in different Degrees ; the first  
'are a little mere salt than the last, which seem to have an astrin-  
gent Taste. They all assume a reddish Colour,, by digesting  
ispon the pulverized Glass of Antimony ; but if digested upon  
any purely sulphuroeus Matter,' they Vvould assume the same  
Colour, but. would hot, on that Account, acquire an emetic  
.Quality. The oily Part of the Vinegar must then have ex-  
tracted the Tincture from that Part of the sulphureous Matter,  
"or Phlogistic, which was Concentrated in the Glass of Anti-

mony στ and the Acid of the same Vinegar must have corroded  
or dissolved a Portion of the Reguline Part of the Glass, or, in  
other Words, of that Part which is most easily reduced into a  
Regulus. Now ’tis already known, and I shall farther prove,  
that it is the Reguline Part os Antimony, in which its emetic  
.‘Quality consists , or, in other Words, its etheric Virtues re-

side in some Combination os Sulphur, composed of a very small  
Quantity of vitriolic Acid, and a Portion of inflammable Mat-  
ins united to a vitrisiable Earth. If this Earth has sewssnter-  
st ices filled with Sulphur, it will be very emetic. This is the  
Cose with Glass os Antimony, which is one os the most emetic  
ins all the Preparations of this Mineral. If these Interstices are  
either large, or Very numerous, asjS the Case with ReguluS of  
. Antimony, which contains more of Sulphur than its Glass, the  
Preparation will be a littieIess emetic. In fine, if these Inter-'  
shoes are so large as to contain more gross Sulphur than there  
is of this vitrisiable Earth, it will retain no emetic Quality at

‘ all, unless convey’d to it by some accidental Circumstance; as  
in Antimony, which does not Vomit, without the Aid and As-  
sistance os some Acid. . \_

The principal Reason why crude Antimony is not emetic, is,  
because the Vitriolic Acid contain'd in it, is united to. an unctuous  
Phlogistic, with which it forms a gross and bituminous Sulphur,  
which so ties up the Particles of the metallic Earth, that they  
cannot act upon the Stomach, without some foreign and adven-  
titious Aid. But when the greatest Part os this Acid, and this  
*e* bituminous Phlogistic, are carried off by Fire, or any other  
Means, then there only remains in the RegulusA Sulphur ca-  
pable os Expansion, and consequently in a Condition to carry  
along with it some Particles of the metallic Vitrisiable Earth,  
which by their Rigidity are capable of irritating the Nervous  
System, and exciting Violent Contractions ; for I suppose, that  
'this Irritation is the first Cause of Vomiting.

It will, perhaps, he objected to me, that all I have said upon  
the emetic Quality of Antimony, was in a great measure known  
before : That may possibly be true ; but, considering the rela-  
tion these Things bear to what I am afterwards to advance, I  
could not forbear shewing, that the phlogistic or inflammable  
Principle of Antimony is not emetic, but so sar as, after its Dis-  
engagement from its Vitriolic Acid, it is united to its vitrisiable  
Earth ; that is, so sar aS it approaches the Form of the Glass,  
or, at least, that of the ReguluS ; and that, in Consequence of  
this, the more the emetic Tartar and the Kermes contain of  
a Regulus that is easy to he reviv'd, the more emetic they must  
of course he. I now come to give an Account of the Experi-  
ments which prove this Truth.

I made use of an Ounce of each of the different emetic Tar-  
tars I collected : I beat them separately with an equal Quan-  
tity, or a little more, of black Flux-powder, composed os two  
Parts of red Tartar, and one of Nitre, calcin'd together : I  
put these Mixtures into different Crucibles, shap'd like inverted  
Cones; I held them in a melting Heat, till the Salts, being melted,  
had sunk down and appear’d like a settled Oil at the Bottom of  
the Crucible : I allow’d the Fine to go out, and the Crucibles  
to cool; then I broke them, and found the ReguluS, which had  
been revived, collected at the Bottoms os the Crucibles.

I had from an Ounce of the weakest emetic Tartars, from  
thirty Grains to one Dram eighteen Grains of Regulus ; from  
those of a middling emetic Quality, a Dram and an half. 2nd  
from such as were most Violent in then Effects, two Drams ten  
Grains.

The Scoriae of these Essays, which were at first yellow, he-  
came afterwards green ; then they assumed a blackish Colour ;  
last of all, they were dissolved per Deliquium.

The Action then of the strongest emetic Tartars depends upon  
the Quantity of the Regulus of Antimony, which the Cream of  
Tartar has dissolved ; and the more Antimonial Preparations,  
which have heen boil'd in the Solution of Cream of Tartar, ap-  
proach to the Form of the Regulus or Glass, the more Violent  
the emetic Tartar is ; because then the Vegetable Acid of the  
Tartar acts more immediately, and distolves more of the emetic  
part of the Antimony. ......

If, on the contrary, this Solution of Tartar Is boil'd with  
Crude Antimony, the Reguline Parts os which are sheathed up,  
and defended by the gross Sulphur, this Acid will scarcely act  
upon it.

I powder\*d two Ounces of the Cream of Tartar with one  
Ounce of Antimony, which had already Keen levigated: I boil'd  
chat Mixture, in a large Quantity of Water, *for* eighteen  
Hours. The Liquor having assum'd a yellowish Colour, and a  
styptic Taste, resembling that of Vitriol. I filtrated it., whilst

as yet bur, thro' a double Paper. The Mass, remaining in the  
Bottom *of* the Matrass, sent forth a sulphureous Smell. Thin  
impregnated liquor heing evaporated, I had Crystals of Tartar,  
two Grains os which, when given for a Dossq only excited a  
flight Nausea.. . . . .

I took an Ounce of these Crystals of Tartar, thus slightly  
impregnated with the emetic Part of Antimopy ; j melted is,  
line other emetic Tartar, with the Slack Flux-powder, and  
round in the Crucible, when cold and broken, a great many  
yellow Scoriae, intermingled here and these with some Grains  
os ReguluS, which were so minute, and in so small a Quans  
tity,. that they could not, by .their own Weight, collect them-  
selves at the Bottom os the Crucible;

Tho' it is evident from this Experiment, that the Acid os  
Tartar acts upon Antimony, and that it corrodes a little os  
its Reguline Part, yet this Corrosion is so weak, that it is not.  
possible by the Reduction to collect the Particles of the Re-  
gulus carry'd off by this Vegetable Acid : st is alte certain, that  
however fine the Powder os the Antimony is, every one os its  
small Parts remains always wrapt up in its gross Sulphur, and  
that this Sulphur defends it, and proves, aS it were, a Covering  
against the Action os the Acid os the Tartar.

.It is then proved, that before a Vegetable Acid ran hecoine  
sufficiently emetic by its remaining upon Antimony, that Mi-  
neral must be freed aS much as is possible from its gross Sulphur ;  
that it is reduced into a Very pure Regulus ; and that the nearer is,  
approaches to the Form os the Glass, without the Addition os  
any foreign Matter to facilitate its Vitrification, the more the  
Acid of Tartar, in Conjunction with the Sulphur, will cany  
off these rigid Parts of the metallic Earth, which I formerly  
said was the Cause os Vomiting. Thus all emetic Tartar;  
winch has been prepared with the Glass of Antimony, and the  
Liver of Antimony wash’d, which is a Species of Vitrification,  
will he much more emetic than any other emetic Tartar, that has  
not been so prepared.

*I* have already shewn, by the .Quantity of Regulus eon,-  
rained in the different, emetic Tartars, which I reduced, that  
it is a Matter os Importance to know to what Degree this Re-  
medy is emetic, and that very considerable Accidents may he  
produced by those random Prescriptions, Jo which four, five,  
or six Grains of emetic Tartar are order'd for a Vomit. If  
then it should he thought proper to follow my Method, in order  
to know in whet Degree any Emetic ought to Vomit, without  
the Operation being follow'd with any troublesome Accidents,  
I shall here draw up a Table os whet was yielded by my seve-  
ral Reductions. I made Choice of emetic Tartar upon two  
different Extremes, that is, the weakest and the strongest ; to  
these I always added that which to me appeared to contain the  
most suitable Proportion of the Regulus.

An emetic Tartar, from an Ounce of which thirty-two  
Grains of Regulus may be produced, contains sour Grains os  
the ReguluS in each Dram, and each Grain the eighteenth  
Part of a Grain, and consequently may be look'd upon as too  
weak.

That which yields two Drams os ReguluS in an Ounce, conis ,  
tains eighteen Grains of it in each Dram ; that is, each Grain  
the fourth Part of a Grain. This works Very Violently, un-  
less given in a Very small Dose.

Lastly, that which yields a Dram and an half of Regulus in  
an Ounce, contains thirteen Grains and an half in each Dram,  
that is, three Sixteenths of a Grain in each Grain. This is a  
due Proportion, and I know two Grains, or two Grains and a  
half os it, will Vomit sufficiently, fince by that Dose six or  
seven Sixteenths of a Grain os the Regulus are convey'd into  
the Stomach.

Tho' I here determine the Quantity os Regulus, contain'd in  
each Grain os emetic Tartar, with relation to the total Pro-

\* duct of a simple Reduction by the black Flux-powder, I do  
not from that mean to conclude, that each Grain of unreduc'd  
emetic Tartar contains precisely the Dose above specified. I  
know that it contains a little more : But aS . this Surplus re-  
mains m the Scoriae of the Reduction; it would be necessary to  
dissolve them in Water, to precipitate the Powder os them,  
commonly called *Sulphur of. Antimony* ; and then to reduce thin  
Powder by the black Flux-powder ; in this Case we should  
also have from it a little Regulus. But I omit this Reduction,  
that my Process, serving as a Proof, may he the more short  
and easy .

**t**

*Examination of* **KERMES MINERAL.**

This Preparation, published by Order of the lging in I72o.  
*is* made by Soiling Antimony in Rain-water, quickened by the.  
Liquor of Nitre fixed by Charcoal ; which is the Alkahest of  
*Glauber.* After she Filtration of the’ Liquor, as yet warm;  
a Powder is precipitated, which, when well edulcorated, is tho  
Very Remedy of which we are treating.

The *Kermes Minor al* was, for some time, look'd upon as a  
Sulphur of Antimony ; and,- taking it for such, I examin’d if  
first by Deflagration in order m know whether it horn’d in a

different Manner from Powder of Antimony, or from Golden  
Sulphur of Antimony.

I made three Pieces of thick China red-hot in the same Fire;  
upon one I let ten Grains of levigated Antimony drop ; upon  
another I let fell ten Grains of the Golden Sulphur of Anti-  
mony of the fourth Precipitation, because that is the finest;  
and upon the third, aS much well-chosen and high-colour’d  
*- Kermes.* The *Kermes* affords a more bluish Flame than the  
other two ; it consumes sooner than the Golden Sulphur of  
' Antimony, which in burning boiis like Antimony itself; these  
\* two last sending up Vapours, or a Smoke much thicker. The  
Smell of the *Kermes was,* in this Experiment, much less sul-  
.phureous and pungent than those of the other two. Byconti-  
. nuing the Fire these three Substances were evaporated, and  
when they ceas'd to smoke, the Antimony-left upon the China  
in reddish-brown Spot, os a Coffee-colour. -

The Golden Sulphur of Antimony left a reddish Substance  
intermix'd with some white Points.

As for the *Kernses,* it only lest a thin, white, spungy Earth,  
interspersed with some little yellow Spots.

I have already-said, that I made Choice of high—Colour'd  
*Kerines,* because 'tis necessary to observe, that if this red Pow-  
der has not been fufficientiy edulcorated by frequent Ablutions  
in Water, and that if too much alcaline Salt remains in it, it  
loses its Colour, when exposed to the Ain, and becomes colour'd  
-with a Flower, or white Stratum. I myself have a Mass of  
*Kermes* of this Sort, the Whole of which is become white,  
.and which, as it whiten'd, lost almost all its sulphureous Odour;  
which Circumstance is a shong Presumption, that there is a great  
deal of Volatility in the sulphureous Part of this Powder; for  
Sulphur os this Preparation is no longer of the same Nature  
with the gross Sulphur of Antimony, because in it the Vitriolic  
Acid has had its Nature alter'd by the Alcali of the fixed Nitre.  
\*In order to he satissy'd as to this, I took of well edulcorated  
*Kermes,* one Part ; with this Powder I extinguished in a Glass  
Mortar two Parts *of* Very pure Mercury, which I had revived,  
without Distillation, from corrosive Sublimate, by Filings of  
’Iron. From this Mixture there was a black Powder or yEthiops  
formed, just as when one extinguishes Mercury with common  
Sulphur. Yet there was this Difference between these two Pre-  
parations : The .ZEthiops made by common Sulphur is a Prepa-  
ration which always yields an artificial Cinnabar by Sublimation.  
If the *Kermes* had been a Sulphur of the same Nature, that is,  
if it had contained a Vitriolic Acid at Liberty to act, I should  
have obtain'd from my .ZEthiops of *Kermes* a Cinnabar of An-  
timony. Notwithstanding this, after having fubjected it to  
the Fire in a Retort till it was almost melted, the Mercury  
passed into the Recipient without any Diminution of Weight.  
Only in that PartOf the Neck of the Retort where it comes  
immediately from the Furnace, there was a small red Circle,  
which, by the way, was only a kind of Tincture, almost with-  
out any Consistence. At the Bottom of the Retort I found  
tlte *Kermes* melted into, several small Masses detached from one  
another, and Of a darker Colour than Liver of Antimony ;  
some of these Masses were full of Bubbles os Air, and all of  
them were brittie. None of these Masses had either the  
Needles of Antimony, or the Laminae of its Regulus. I he-  
sieve that what facilitates this Fusion of the *Kermes,* tho' so  
imperfect as that it cannot be look'd upon as a Reduction, is  
the Portion os alcaline Salt necessarily contained in this Powder,  
but which is not sufficient to produce a complete Revivification  
os the Regulus. All these Masses were rough, with small,  
transparent, rigid, and brittie Needles. The Arch os the Re-  
tort was cover'd with a Very fine, white Powder, interspers'd  
with small Groupes of the like Needles rang'd almost like a  
Star, with many Rays darting out from it. These Groupes  
os Needles were most apparent near the Neck os the Retort,  
where they had- stopp'd upon a Bed os yellow Dust. The  
Difference os Colours in this sublim'd Dust and Groupes of  
Needles, was not easy to be discover'd, unless when I made the  
Experiment with a small Quantity of Matter ; for when I em-  
ploy'd a large one, the Fire, in melting the *Kermes,* rais'd  
a more turbid and brownish Substance to the Top of the  
Retort.

It then a Cinnabar produced by *Kermes* and Mercury is  
deshed, we must either add a vitriolic Acid to them, or disen-  
gage that which has heen said hold on by the Alcali of the fixed  
Nitre, that, in Conjunction with the inflammable Part of the  
*Kermes,* it may act like a common Sulphur reproduc'd.

*First* **EXAMPLE.**

I took an Ounce of *Kermes,* and, during Trituration, pour'd  
upon it sixteen Drops of the Oil of white Vitriol, which  
was not sulphureous. After Trituration for an Hour, the  
Powder did not tome appear acid; afterwards Γexfin-  
guished in is, by littie and little, four Grains of purified  
Mercury: I continued the Trituration for- fifteen or six-  
teen Hours ; for the Mixture was a long time before, if  
affirmed the blackish Colour of-ZEthiops. Then, upon put,,  
ting this AEthiops into a Retort, a yellow Sulphur, in 2

small Quantity, rose unto the Neck of the Retort, -and  
then a Very black and bituminous Substance; the Mercu-  
ry, in the mean time, pass'd in a liquid Form into the R4.  
ceiver. When I observed, that nothing ascended any  
longer, I augmented the Fine, melted the Bottom of the  
-Retort, and next Day found, upon the Top of the Re-  
tort, and on the Surface of the Mass which remain'd atthe  
Bottom, a pretty considerable Quantity of a very beautiful

- Cinnabar of Antimony; but it required a Melting-heat' in  
order to sublime it. '\* i —

*Secund AEX* **AMPLE. ...... 'sc-**

*ia.* order to disengage the Vitriolic Acid from rhe *Kermes,*entangled and wrapp'd up in the alcaline Salt of the fixed

. Nitre, I took three Parts, or nine DramS, of *Kermes y*and four Parts, or twelve Drams, of corrosive Sublimate;  
for these are the Proportions fix'd by the late Mr. *Lemery,*who analysed Antimony so accurately: I put this Mixture  
into a Retort, and forced it by a reverberatory Heat. The  
Distillation yielded me Butter of Antimony in a liquid  
Form; which is a Proof os a Regulus being contained in  
*Kermesso* then a revived Mercury, and, last of all, a true  
Cinnabar of Antimony; -1 also found,- at the Bottom of  
the Retort, a Substance like melted Antimony, with sew  
*Scoria.* The Top of the Retort was covered with white  
Flowers of Antimony.

By this Experiment it appears, that the Acid of the Sea-salt,  
which was contained in the corrosive Sublimate, has quitted its  
Mercury, in order to attack the Reguline Part, of the *Eermes,*dissolve it, and convert it into Butter os Antimony: It also ap-  
pears, that this Regulus, converted into Butter, has left at Li-  
herty the Portion os Vitriolic Acid, which, in the *Kermes,* before  
the Process, was united with the Alcali os the fix'd Nitre, with  
the sulphureous Part, and with the metallic Earth of the Anti-  
mony ; sor these are the four Ingredients in this Powder. It  
also appears, that at this time the Portion of vitriolic Acid,  
heing partiy disengaged from the Substances with which It was  
entangled, has resumed that Proportion of the Phlogistic, which  
was necessary for its being again converted into common Sul-  
phur, and rising in Cinnabar, by uniting with the Mercury. I  
took the Mass in the Bottom of the Retort, and having reduced  
it by the black Flux-powder, I had twelve Grains of Regulus  
from the nine Drams of *Kermes,* which I used in this Experi-  
ment; that is, one Grain and a Third of Regulus were yielded  
by each Dram of the Kermes. AS I repeated the whole Steps  
of this Process twelve different Times, upon twelve different  
Sorts *osKermes,* the Products of the Reduction Varied ; fori  
have found two Sorts of *Kermes,* which, by the reductive Flux-  
powder, have yielded two Grains and an Eighth for each Dram  
of Powder, upon which the Experiment was tried: Thus that  
*Kermes,* the Regulus of which is so easy to be revived, is of all  
others the most emetic. \* To these Products of revived Regulus;  
we must add that Portion of the Regulus which, has pass'd into  
the Butter of Antimony, and that which remained in the Scorite  
of the Reduction. ‘ . -

in order to prove, still more effectually, that there is no oom-  
mon Sulphur in the *Kcrmes* ; or, at least, if it contains any in  
the Form of common Sulphur, that it is in too small a Quan-  
tity to rise in Cinnabar with the Mercury, Lput into a Retort  
half an Ounce of *Kermes,* well wash'd, without any Addition \*  
I augmented the Fine by degrees, and, with a moderate Heat,  
there was formed, at the Neck os the Retort, a yellow Circle os  
real Sulphur; but it was in aS small a Quantity as the Ted Circle  
without Consistence, in my first Experiment upon *IOrmes* tri-  
turated with Mercury.

- I have then shewn, that the *Kermes* and Mercury, Joined  
together, cannot yield Cinnabar without the Aid of a Vitriolic  
Acid, or the Help of corrosive Sublimate : Let us now inquire,  
what it will .produce with the Vitriolic Acid.concentrated, in  
Mercury. μα  
- For this Purpose, I put into a Retort a Dram of Turbith  
Mineral, rubb’d with an equal Quantity of *Kermes :* The Re-  
tort being placed in a reverberatory Heat, a littie insipid Phlegm  
was first yielded ; afterwards there was fix'd, about the Mouth  
of the Retort, a Vapour, which was.at first white, then yellow,  
afterwards a pale Red, and, last of all, a deep Red, like Cinna-  
bat. This red Colour was a little on the brownish Cast, in that  
Part of\* the Neck which was most exposed to the Fire: The  
interior Sides of the Retort were cover'd with a yellow and red  
Stratum, upon which were sublimed.Groupes or Clusters.of  
Needles, resembling those I have already mentioned. Upon  
taking away the Receiver, there came forth a sulphureous and  
Very-penetrating'Smell : I'took from the Receiver fifty-two  
Grains, of revived Mercury-, and the Retort being cut, T sound -  
at its Bottom a Mass, divided into several Parts, which, as to  
their Colour, had a Metallic Appearance; but .were spongy and  
rough, with many white and shining Needles.

Thus, in this Experiment, the Vitriolic Acid of theTurhith  
Mineral abandons its Mercury, in order to seize or attack

the Phlogistic, the Alcali, and the Metallic Part of the *Kermes;*a Part of this Acid, heing united to the Phlogistic, was again  
converted into burning Sulphur: This made op the yellow Cir-  
cles about the Neck, and at theTop of the Retort ; for, upon  
taking some of it off, I saw it burn like Sulphur; A Part of  
this regenerated Sulphur was joined to some Portion of Mercury,  
and sublimed into Cinnabar ; at least- the red Circle to me ap-  
pear'd a true Cinnabar. At last the rest of this Acid was con-  
eentrated with theRegnline Part, arid was the productive Cause  
of all those Needles with which the Masses, in the Bottom of  
the Retort, appear'd rough. t

This same Vitriolic Acid of the Turbith Mineral finds, in  
the red precipitate Mercury, Materials for subliming another  
- Substance, which is neither a Cinnabar, nor a corrosive Subli-  
mate. The’ the two following Experiments seem to have little  
relation to our present Subject, they nevertheless deserve our  
Attention.

. I put into a Retort a Mixture of one Dram of Turbith Mi-  
neral, and one Dram os red Precipitate: These two Substances,  
at first, yielded an Acid, which was of a nitrous Taste and  
Smell; afterwards there appear'd a Steam of a very strong sul-  
phureous Odourwhich must have proceeded either from the  
Phlogistic of the Mercury, or from that of the Spirit of Nitre,  
Ho matter which.

- One Dram and twenty-sour Grains of Mercury pass'd into  
the Receiver, and the Remainder was sublimed to the Neck of  
the Retort, in the Form of a white Mercurial Salt; which is  
not a corrosive Sublimate, but a Turbith sublimed, since it does  
not dissolve in Water, but becomes yellow in it, just as Tur-  
bith Mineral does.

:. Turbith Mineral, put alone into a Retort, only yielded thirty-  
one Grains of liquid Mercury each Dram : Belides, it was ne-  
cessary to augment the Fire so far aS to melt the Retort, at the  
Bottom of which there remain'd a white Spot, which had pene-  
trated the Substance of the Glass; and in the Neck of the Re-  
tort, I found, sublimed, a littie yellow Sulphur, regenerated,  
probably,, with .the Phlogistic of the Mercury, and a white  
compact Substance, winch neither dissolved nor changed its  
Cosour in Water; winch was also the Case with the white Spot  
at the Bottom of the Retort. This white indissoluble Substance  
is, according to *Eurickel,* the Salt which was lodged in the Oil  
of Vitriol, and which the Mercury had Strength enough to raise.  
This may possibly he whet the {ante Author, in several other  
Passages, calls rhe *Salt of Metals* ; for, according to him, that  
Salt is contained in the Oil of Vitriol. It is well known, that  
the red Precipitate, forced by a great Fire, revives of itself  
without Addition.: Each Dram of it yields from sixty-fiVe to  
fixty-six Grains of Mercury: There remains in the Bottom os  
the Retort a reddish-grey Earth ; and about its Neck there  
appear three Circles, one red,- another yellow, and the third  
white.

A Dram of the fame Precipitate, heing distill’d with an equal  
Weight of well-washed *Kermes,* yields an acid sulphureous  
Liquor : There appears on the Top, and about the Neck of the  
Retort, a Very small Tincture of Red, and sixty-five Grains of  
Mercury are revived.

A Dram of the same red Precipitate being distill'd with an  
equal Quantity of levigated crude Antimony, the Mercury was  
less quickly revived then in the two preceding Experiments ;  
because the Flowers which rose from-the Antimony being in  
great Quantity, the interior Sides of the Retort were; by that  
means, render'd less smooth; and- the mercurial Vapours must  
of Consequence have flipp'd over them with the more Difficulty:  
Nevertheless, when all the Mercury was collected, it amounted  
to sixty-six Grains, full Weight. Thus it appears, from these  
three-Experiments, that in-one Dram of red Precipitate there  
are only six or seven Grains of the Acid of Nitre.

But to return to *Kermes* ; I have shewn, that this Powder,  
which one would he inclined to take for a Sulphur, is the very  
Metallic Part of Antimony, smce both a-Butter and a Regulus  
of Antimony may be procured from in; but the inflammable  
Sulphur of Antimony has changed its Nature; The Alcali of  
the fixed Nitre has, in Conjunction with is, formed a Liver of  
Sulphur, which is divided and suspended in-the Liquor, during  
the Ebullition, by which the *Kermes* is to he extracted. It is  
fufficientiy known, that Liver'of Sulphur has a Power of dis-  
solving all Metals, Gold not excepted, when fused-with it. lst  
is true, *Kermes* is not prepared by aLiverofSulphur.inFusion;  
nevertheless, when simply dissolved in Water, there is nothing  
to hinder.it from attaching the Metallic Part of Antimony-: And  
this us *so* true, that if Rain-water he too much charged with  
. alcalineSalt, there is precipitated from *ita-Eermes,. from which,’.*by the black Flux-powder, one procures, a-great'deal more of  
Regulus, than if. the *Kermes* had been prepared by a\* less" acrid  
Liquor. *Kcrmes,* then, is nothing more than a *Liver* of Sul-  
phur, impregnated with the Metallic Part of Antimony ; but  
this Metallic Part is; in it, divided into extremely small Parti-  
ales ; and the finer these are; the less emetic will the *Kermes* her  
Thus, after the *Kcrmes* is prepared according to the Process  
published by the Icing's Order, which her. ofraliothers, thebest;

if a Species which shall only act, as it were, by Colliquating **the**Humours, without exciting a Nausea, he desired, we must take  
a Dram os *Kermes,* put it into a pretty large Matrass, pour sour  
Pounds and an half of Water upon it, in which two Drams and  
an half of fix'd Nitre must he dissolved, winch has been before  
distolved, filtrated, evaporated, and reduced into a dry Form,  
in order to depurate it from a pretty considerable Sediment,  
which it leaves upon the Filtre; lastly, it must be boil'd: A  
greyish Earth, and the grossest Portion of the Regulus will pre-  
cipitate, and by pouring off the Liquor, and allowing it to cool,  
we shall have a *Kermes very* fine, very red, and much surer in \*  
its Operation, when ft is not given with a View to Vomit ; for  
this corrected or rectified *Kcrmes* can never prove emetic, unless  
by Accident, when some other Circumstance, concurs to make  
it so. . It is true, by this Rectification near one half of it is  
lost.

As to unrectified *Kermes,* as we often find some of it, which  
is not prepared with all the necessary Precautions, that the Re-  
guline Part may be sufficiently divided and attenuated in it, **I**helieve one may, with Safety, substitute in its room Antimony  
itself, prepared in the following manner:

. Take *Hungarian* Antimony, in small Pieces ; make Choice  
os that which has beautiful .shining Needles ; reduce.it to  
a Powder, and pass it thro' the Searce; then levigate in  
with Water till it ceases to crackle under the Teeth : As-

- terwards put it. in a Bowl-full of Water; stir the Water  
with a wooden Spatula; and aster having allowed the  
Soflest of the Powder to subside for twelve or fifteen  
conds, pour off the Water, by Inclination of the Ves-  
fel, upon one or more Filtres. Take the subtile Powder  
which remains upon these Filtres, and dry it in a Stove a ,  
When it is sufficiently dry, levigate it afresh, adding a  
Dram of very dry Sugar-candy, powder’d, to each Ounce  
of the Powder of Antimony; and continue to pound it  
till such time as when you spread a littie of the Powder  
with a Knife, you may not, in a clear Light, perceive any  
shining Particles.

'Tis long fince the Powder os Antimony was extoll'd as an  
excellent Remedy against Disorders os the Lungs, as a fine Re-  
solvent in an Asthma, and in many other Disorders.

in 1674. *Kunckel,* heing racked with very smart Pains in his  
Right Ann, consulted *Sennerius,* a Physician, in *Wiitembcrg,*and Son to the famous *Sennertus,* who ordered him to use An-  
timony, which he did *for* the Space of a Month, and by ita  
means had hiS Pains removed.

In 1679. the same *Kunckel* had recourse to levigated Anti-  
mony, for severe Gout-pains both in his Hands and Feet. He  
formed it into Troches, and got cured by its means. These  
Antimonial Troches are still known in some Towns os *Germa.,  
ny,* by the Name of *Kunckells* Troches (*particularly at* Franc-  
fort *and* Nuremherg).

If my Testimony can add any Sanction to this Matter, I can  
boldly Venture to assure the World, that this Mineral, in fine  
Powder, is a sovereign Remedy for Rickety Children, or Inch  
as have Knots on their Joints, and for all those who have ob-  
structed-Glands. It produces Very good Effects in Children  
tormented with Worms ; and I have known Women labouring  
under a *Fluor Albus,* who, after using the common Remedies in  
Vain, have been cured by this Powder: But, at first, it should  
only he given in Very sinall Doses, not exceeding a Grains And  
tho’ Antimony is not of itself emetic, it is, nevertheless, pro"-  
per to add to the Powder of it three or four Parts of some Alcali,  
such as Crabs-eyes, or any other of the like Nature. The  
Dose should he augmented by degrees; and thus one may, at  
i last. Venture upon eight or ten Grains a Day. If the Doses  
were increased too fast, they would produce Gripes in the  
Intestines, purge the Patient, or bring on a Nausea: The  
Patient must also be cautioned against the Use of Wine, except  
it he Very mellow. He must also abstain from Vinegar, and  
every other Acid, and even from Soups, in which acid Herbs,  
such as Sorrel, *etc.* have been boiled.

From what has been said, it follows:

I. That the emetic Quality of Antimony is lodged in its  
metallic vitrifiable Earth, which is already well enough known  
to Chymists ; that emetic Tartar does not Vomit, but because  
it isimpregnated with a great many gross Particles of this Earth ;  
and that by reducing it; by the black Flux-powder, we may  
know in what Degree it is emetic;

2. That the *Kermes* is a Liver *of* Sulphur, which hag dissolv'd’  
R Portion of this Metallic Earth, but more subtilely than the  
Acid of Tartar, does : That one may rectify Antimony so as to  
render it simply resolvent and diaphoretic: And lastly, that a  
fine Powder os Antimony may be substituted in the room of the  
*Isermes Mineral. Menu de V Academic Royale,* 1734.

*Farther Observations on* **KERMES MINERAL,** *by- Mr.*Geofiroy.

In I734. I presented ^ Memoir in two parts '; the first on  
Emetic Tartar j the -other on *Kermes* Mineral. This second

Part not containing a sufficient Examination of that Preparation  
of Antimony, I thought it necessary to add thereto the Supple-  
inent which follows ; in which I first examine the *Kermes* pre-  
pared by Ebullition, then the *Kermes* prepared by Fusion, but  
poll with the Assistance of Alcalinc Salts; after which, *I* hope  
to shew, tl.ar Antimony, treated with Acids, yields a Prepara-  
tion not much different, as to its Effects, from the Preparations  
obtained by Alcalis: ' '

i' Antimony, the’ already analysed by an able Hand, may still  
supply us with a Set of Facts, which, if sufficiently adverted  
in, .will only confirm what die late MI. *Lemery* has published  
roncedning it, and render out Chyrnical Examination of this  
Mineinl the more complete.

**υ:.... - KERMES** *prepared by Ebullition.*

‘' The following Experiment required an indefatigable Patience,  
since the Process was seventy-eight times repeated upon the  
farne Antimony, and with the fame Lixivium of Alcaaine Salts;  
There are not, indeed, any dazzling Circumstances in such a  
tedious Operation ; but the Mind is sufficiently recompensed set  
. its Labour, by being iatissied with regard to theTruth of a Fail  
which was formerly dubious; and by being put in a Capacity of  
proving, that, by a still greater Degree of Patience and Perseve-  
rance than I used, iris possibleto reduce the Whole of Anti-  
mony into *Per me:,* except forne Sediments, which shall he  
examined separately.

- I- shall shew, at the fame time, that *Kermes* is no more than  
a Magistery, or a Precipitate of the Rcguline Part of Anti-  
mony, divided into extremely fine Particles, which are cover’d,  
in IF were, with a Stratum of Liver of Sulphur, and conse-  
quently with a fort of Varnish, composed *of* an alcaline nitrous  
Silt, and a gross or inflammable Sulphur of the Mineral: That  
the alcaline Salt may be disengaged from the *Kermes,* and sub-  
jcctedto the Senses, by being made a Basis for regenerating tbeNi-  
tre, and die Sca-falt, in order to form a vitriola ted Tartar .. That  
we may also separate from the *Kermes* a white Earth, difficult to  
be perfectiy known, and which belongs either to the alcaline  
Salt, or to the Antimony, or to the Water employ’d in the  
Ebullitions, or perhaps to all the three. .

In order to procure this Magistery, I heve exactiy followed  
the Process published by the Kings Order; that is, I took **a**Pound of *Hirngarian* Antimony, broken in small Pieces, accord-  
ing to the Direction of its Needles ; four Ounces of the Liquor  
of Nitre, fined by Charcoal, and well filtrated ; and a Pint of  
Rain-water. After two Hours Ebullition I filtrated the Liquor,  
whilst as yet hot, which precipitated the *Kermes* as it cool’d.  
At a second Ebullition I added three Ounces of fresh Liquor of  
fixed Nitre, and one Part of Rain-water. At a third Ebulli-  
tion I pout’d, upon the decanted Lixivium, two Ounces more  
of the seme alcallne Liquor, and a Pint of Rain-water. This  
is the Process published by the King’s Order, strictiy followed.  
**I** extracted from it a *Kermes,* which, when well edulcorated,  
and sufficiently dried, weighed only one Dram sixty Grains, the’  
the Antimony had lost two Drams. ,

L repeated the fame Process with sour Pounds of fresh Anti-  
mony, one Pound of the Liquor of fix’d Nitre, and four Pints  
.. of Rain-water. At the second and third Ebullitions, I added,  
first, twelve Ounces cf alcaline Liquor, and four Pints of Wa-  
ter ; afterwards eight Ounces of the same saline Liquor, and  
.four Pints of Water more. These three Preparations yielded  
an Ounce and two Drains of *Eerrnesy* and the sour Pounds of  
Antimony lost seven Drams and an half.

' If the Products of thefe two Processes, when compared, bad  
born a Proportion to the Substances employ’d in them, I should  
have only had, by the second Operation, seven Drams and  
twenty Grains of *Kermes,* and the four Pounds of Antimony  
should have lost an Ounce. But Sis probable, that this Differ-  
mice in the Diminution of the Weight of the Antimony pro-  
ceeds from the Difference of the Surfaces of that Mineral;  
which, in the second Operation, did not amount to four nines  
the Sum of the Surfaces in the Pound of Antimony employ’d in  
rhe fust Operation: As for the Augmentation of Weight in **the***Kermes,* in the second Operation, may not one account for it  
by faying, that a large Quantity of alcaline Salt sooner forms a  
proportionably greater Quantity of Liver? Thet the more  
haver there is, the more Regniine Particles will he disengaged;  
and that the more of there Particles are disengaged, the more  
there is of this {aline and sulphureous Varnish, which I men.:  
tinned; and that there must consequently he more Weight,  
since more Circumstances concur to augment it? Besides, ’tis  
well known, that the Products os a great many Operations,  
when perform’d upon fmall Parcels, are never equal, in Propor-  
tion, to the fame Operations when performed upon- large  
Ones.

Thet I might still more effectually discover what pastes in **the**Process of *Eerrnes,* and what Substances are separated from **the**Mineral, I took the Antimony of the two preceding Opera-  
tions, weighing five Pounds all but nine Drams and an half of  
Loss. I also took the Liquor of the icedi Nitre, which .had  
served in the six preceding Ebullitions, and of which j bad twa

-Pounds thirteen Ounces ; and, without adding any thing in st  
at each Operation, except well filtrated Rain-water, I made  
thirty Ebullitions, and as many Precipitations, one aster another.  
From the Vessel there arose a sulphureous Steam, which black-  
en’d Silver when held above it: One might alfo not only disco-  
ver mis fiilphureous Smell, but likewise that of a strong Lixi-  
.vium, mined with a small Quantity of an urinous volatile Sub-  
stance.

This Steam, being condensed and collefled in a Glass Head,  
turned the Syrup of Violets green, slightly render’d the Solution  
of corrosive Sublimate milky, and precipitated into a bright  
citron Colour the Solution of Mercury in the Spirit of Nitre.

At each Ebussition the Liquor of the Nitre, as I heve already  
observed, disengaging feme of the Particles of the gross Sulphur  
of Antimony, there was a Liver of Sulphur form’d by them.  
This Liver dissolves or divides the Regniine Part of the Mineral,  
and this Division is facilitated and promoted by the Attrition of  
theParts of the Antimony, which the Ebullition keeps in con-  
tinual Agitation.

This Attrition, caused by the Ebullition, appears to he neces.  
sary in this Process of the *Kermes,* because the alcaline Salt of  
the Lixivium cannot ach upon the Reguline Part tlll the gross  
Sulphur of the Mineral is disengaged from it,\_ in order to join  
itself to this Alcolu and form the Laver, which proves a Dissol-  
vent to this Reguline Part i Now, without this Attrition, the  
Alcali could only form the Liver, with the Sulphur of the first  
Surfaces of the Pieces of Antimony. In this Case there would  
. he a small Quantity of Liver, and consequently a small Diflolu-  
don of the Reguline Part. For this Reafon, the first Ebullition  
never yields so much Precipitate as the second, nor the second  
so much as the thisd. This Progression has, nevertheless, its  
Bounds, heyond which it does not go.

The alcaline Liquor, being sufficiently impregnated with the  
Sulphur, and the Regulus of Antimony, ceases to acts and must  
he filtrated; first, thet, upon the Filtre, it may disengage itself  
from the gross and unattenuated Parts of the Antimony, which  
have been detach’d from that Mineral by the reiterated Attritions  
during the Ebullition; and secondly, that, as it cools, it may de-  
pofit the Parts of the fame Mineral, which have been suffi-  
ciently divided by the Liver, and which are become sine enough  
to pass through the Filtre with the Liquor as yet warm.

As long as the Liquor is hot, it is kept in a Motion rapid  
enough to hinder the fine Particles of the *Kermes* from reunitiog  
into too large Molecules. In this Cafe the Particles past thro’  
the Pores of the Paper with the .fame Ease the Liquor does t  
Bat, in proportion as the Liquor grows cool, the Rapidity of  
the Motion ceasing by degrees, these fame Particles are collected,  
agglutinated to each other, and compose Molecules of such a.  
Size, thet they can no longer he suspended inthe Liquid, but  
fall to the Bottom in a Magisteryi st is impossible but the Lixi-  
vium must, at each Ebussition, lose a small Portion of its alca-  
sine Salt; since this Portion must have been employ’d to compose  
the Liver, which has corroded the Reguline Part of the Anti.  
mony, precipitated with this same Portion of the Liver, under  
the Form os a red Magistery: For I shall afterwards shew,  
much more clearly than I heve hitherto done, that *Kermes* is a  
Magistery of the Regulus of Antimony, tainted to the grofs  
Sulphur of that Mineral, and to a small Portion of the alcaaine  
Salt, which may he disengaged from it; or, in other Words, it  
is an Antimony which is not, strictiy speaking, destroyed but  
of which the Arrangement of the Parts is changed by disen-  
gaging the gross Sulphur from rhe interstices it possesses, which  
occasions a Rupture of the Sides of these interstices, which,  
changing both their Situation and Form, mix with the new  
Compound of the Liver, and make it appear a Magistery, more .  
or less coloured, in proportion to the Quantity of Alcall and  
Sulphur which is united with it.

But if it is not possible, that the alcaline Liquor shall not  
lose a small Portion of its Salt at every Ebullition, one may  
easily conceive, that it must only lofe very littIe at each tune .  
since, without the Addition of fresh Salt, it is able, after the  
Filtration, to act again upon the Antimony for a considerable  
Numher of Times; and since thirty repeated Ebullitions of  
five Pounds of Antimony yielded seven Ounces of *Kermes,*always as beautiful and fine as the *Kermes* yielded by the first six  
Ebullitions, performed upon one Pound, and afterwards upon  
sour Pounds, of this Mineral.

Observing thet, at the thirty-sixth Boiling, this Liquor actsd  
almost as well as at the six first, I made it serve for twenty more  
Boilings, without any other Precaution than putting aside the  
small Ncedles of Anthnon}., which increased, in Quantity, in  
proportion as the Boilings were multiplied. These twenty addi-  
tional Ebullitions still yielded me five Ounces three Drams and  
an half of *Kermes*; whereas I had only seven Ounces from the  
first thirty Ebussitions.

I made ten Ebullitions more, which still yielded me four  
Ounces one Dram and an half of *Kermes.* Thus these thirty  
last Ebullitions yielded me two Ounces and five Drams of  
*Kermes* more than the first thirty. This Augmentation of the  
**Prnduol proceeds, as! have above observed, fromithis, thetthe**

AttntionS of the Pieces of Antimony heing multiplied, new  
Surfaces are thereby discovered, which furnish a new Sulphur to  
the alcaline Liquor ; and this Sulphur, heing added, renders the  
Liver more active and penetrating; or, in other Words, makes,  
aS it were, a new Liver at each Ebullition.

There remains, as I have said, upon the FiltreS a pretty con-  
siderable Quantity of fine Needles, mixed with a sort of earthy  
Sediment: I boiled this Sediment, winch weighed near night  
Ounces, twelve times, with the same alcaline Liquor, and it  
yielded me two Ounces three Drams and an half of *Kermes.*. By these seventy-eight Ebullitions I had, from my five  
Pounds of Antimony, one Pound four Ounces four Drams and  
twenty-sour Grains of *Kermes.* It is not easy to tell, precisely,  
how much the Antimony Jost of its Weight; for, perhaps, it  
retained, in the Interstices of its Needles, a certain Quantity of  
alcaline Sals, since it still weighed three Pounds fix Ounces;  
which, joined to the Weight of all the *Kermes* drawn from the  
seventy-eight Ebullitions, yields an Augmentation of two  
Ounces sour Drams and twenty-four Grains, including the  
Weight os the muddy Substance, deposited on the Fileses:  
Thus 'tis evident, that this Augmentation must be owing either  
to the Union of a Portion of the .alcaline Salt with the rest of 1the Pieces os Antimony, or to the Union of this same Salt  
with the precipitated Magiftery. There is no Doubt to be made  
but the alcaline Salt is united to this Magistery r This I asserted  
in my former Memoir, hut shall prove it in this : But I .can-  
not, in like manner, prove the Uninn of this Salt with the  
Antimony; so that this Point mutt remain conjectural. Τ shall.  
now examine the Lixivium, which remained, of the seventy-  
eight ebullitions : I distill'd it, and the first Steams furnished a  
gentiy sulphureous Liquor, winch gave Marks os an urinous Vo-  
latile, of which I shall afterwards speak.. About the Middle of  
the Distillation, a small Quantity of white Earth was preci-  
pitated. - .......

After the Separation of this first Earth, I continued the Di-  
ilillation *of* the Liquor, till a Pellicle appeared on Its Surface,  
Upon which long Crystals were formed in it,-the finest of winch  
melted a little on the Coals, and consequently must have been  
nitrous.

But as these Crystals were still mixed with a muddy, sat, and  
coarse Matter, I made a fresh Solution of them in Rain-water,,  
and there was precipitated a second white Earth like the first,  
and which weighed four Drams sixty .Grains. The Liquor  
which; was separated from this Earth being evaporated, new  
Crystals were formed in it, but like those os a foliated Earth,  
that is, in flat Leaves almost square, some of winch were never-  
theless triangular. They only preserve this Figure so long as  
they are kept dry ; for as soon aS they are exposed to the Hur  
midity of the Air, they quickly run *per Deliquium,* and in that  
State, tho' indeed flowly, crystallize themselves again ; and in  
a sat Sediment which is deposited, resume the Forms of prisma-  
' tic Crystals, no Part of which is any longer fusible upon Coals ;  
upon which they crackle, and break like vitriolated Tartar;  
the’ that Crackling does not in the least resemble the Decrepi-  
ration of Sea-salt.

However hot the Coals may be render'd by blowing them,  
these Crystals do not melt upon them, but are converted into  
an earthy white Substance, which has the same Appearance  
with that earth winch had subsided hefore their first and second  
Crystallization. ’ ’ .

These Crystals, aS I have said, were form'd in a fat and  
unctuous Sediment proceeding from the Solution *pcr Deliquium,*Or Mother-water of the Crystals, in the Form of foliated Earth.  
I shall now examine this Solution by. Distillation. . I made use  
’ of five Ounces of it, which at first yielded an aqueous Liquor,  
which smell'd like animal Substances when under Distillation.  
There was afterwards yielded a volatile urinous Spirit, which  
was sufficiently pungent, of a beautiful Yellow, and winch  
weigh'd two Drams. And lastly, there remained in the Retort  
two Ounces two Drams and an half of a Caput Mortuum,  
which, being subjected to a greater Fine, yielded six Grains os a  
Volatile Salt, in a concrete or dry Form. After having broken  
the Retort, I found a white and red Mass, from winch exhal'd  
an ammoniacal Smell, like that winch comes from Vessels in  
which Sublimations os Sal Ammoniac have heen made.

This Mass, when broken, resembled the *Scoria* of Regulus,  
arid was full of Bubbles or Cavities, winch were interspersed  
with small Grains of a fine and sparkling Regulus, which had  
been reviv'd during the Fusion. These Scoriae, or saline Masses,  
as they became moist by being expos'd to the Air, assum'd a  
greenish Colour, and smell'd like Liver of Antimony. They  
would have been entirely dissolv'd *pcr Deliquium, is I* had left  
them long expos'd to the moist Ain; bur that I might produce  
this effect the sooner, I pour'd boiling Water upon them,  
.which assum’d a brownish-green Colour. Upon filtrating in  
when hot, there remain'd upon the Filtre a green Matter,  
.which consisted of Sulphur ; and there pass’d thro' the Pores of  
the Paper a Liquor, which, as it became cool, allow'd a pretty  
Considerable Quantity of *Kermes* to subside.

This saline Liquor, swimming above the new *Kermes* when  
evaporated, yielded me Crystals of different Nature from those  
os the foregoing prismatic Salt. These Crystals melt pretty  
soon, and appear to be a crystalliz’d Alcali, or an alcaline sul-  
phureous Salt, which, while it remains in that State; may he  
call'd a Salt of the Liver of Antimony ; for it has at one and  
the same time a lixivial Taste, and a Taste of the Liner ; bur if  
that sulphureous Salt is disseis'd with cold Water, there remains  
a true Vitriolated Tartar at the Bottom of the Solution.

This sulphureous Salt or Liver bubbles upon burning Coals,  
and hecomeS yellow, winch is a Proof, that there is Sulphur con-  
tained in it. It blackens and corrodes the Plate *os* Silver upon  
which it is melted by the Fine, and turns the Syrup of Violets  
green. It makes an orange-coloured Precipitation in the Solu-  
tion of corrosive Sublimate, and on the Surface of the linquor  
leaves a sulphureous Pellicle floating, which, when taken off,  
burns like the common Sulphur.. In a Word, it has all the  
Characters necessary to give it the Denomination os a sulphu-  
reous Salt, or Salt *of the Diver of* Antimony. It is different  
from the Salt.which may he extracted from the Liquor of fixed  
Nitre, - which has not pass'd thro' the Ebullitions with rhe Anti-  
mony:; for from that Liquor evaporated, I had only some sew  
long and prismatic Crystais, like those I have above described,  
and which, like them, became white Upon the Fire, without  
either melting or decrepitating; and winch also, like them,  
burst with a crackling Noise.

I now return to the white Substance deposited 'during the  
Crystallization of the sulphureous Salt, or Salt of Liver of the  
Lixivium of seventy-eight Ebullitions of *Kermes.* To look at it,  
one would take it for diaphoretic Antimony; but it is no such  
thing, because Aqua Regia dissolves it, but has no Effect upory  
common diaphoretic Antimony. It ferments with the Acids of  
Nitre and Vitriol. A Regulus is reviv'd from it upon burning  
Coals; and hefore it rises, one sees small Flashes break .from it  
of the same Colour with the Flame of Sulphur, and which dis-,  
appear instantly. As this Powder is not diaphoretic Antimony,  
so neither is it the *Materia Perlata,* since Acids do not act upon  
this last Preparation, any more than on diaphoretic Antimony.  
All the white Substances which I separated from melted Anti-  
mony, with different alcaline Salts, were of the fame Nature  
with that I have now mention'd. And as I know no Prepara-  
. tion of Antimony to which I can compare it, why may we not  
call it a *white Kermes, οτ a white antimonide Magnesia,* fince;  
when taken internally, in a small Dose, it proves diaphoretic,  
and does not excite a Nausea ?

I now resume the Examination os *Kermes,* winch I proposed  
to make, and which is a necessary Supplement to my former  
Memoir/ - . . - - .  
... This Powder is always found of different Colours, in pro-,  
portion as the alcaline Liquor employ'd has been more or less  
Concentrated. If it is richly impregnated with Salts,-the  
*Kermes* will be of a very deep Red; or, which amounts to the  
same, if the Ebullition has only lasted for a short time,, the  
*Kcrmes* will be pale; because there will not be enough of  
Phlegm evaporated from the Liquor, in order to concentrate  
the Salts. In order to prove this, we need only pour a fresh,  
pure, boiling Water upon the Filtre, on winch the boiling Li-  
quor which contains the *Kermes* was pour'd, and the *Kermes*will by that means be much paler than it would have been with-  
out tins Addition of Water. -

When we let a Dram of *Kermes* drop into three Drams of  
*Aqua Regia* made of the Spirit of Nitre, and the Spirit of.Salt,  
the Dissolution is made with a great Ebullition, and an intense  
Heat, and from the Spirit of Nitre arise very red Vapours.  
When the Ebullition is at an End, the Smell of the Mixture is  
chang'd, and hecomes sulphureous. After the Fermentation is  
totally over, there remains a yellow Sediment, above which  
there is a Liquor upon whose Surface a sulphureous Pellicle ap-  
pears, which, when taken off with a Piece of Paper, burns  
like common Sulphur. I wash'd and dry'd this Sediment, -and  
next Day found a Globale of liquid Mercury, weighing some-  
whet more than the Fourth of a Grain. Now, on Supposition,  
that this Globule of Mercury was found there, without any  
Circumstance that could lay a Foundation for our suspecting,  
that it existed formerly in the Antimony, it would he no more  
than the two hundredth and eighty-eighth Part of the Dram of  
*Fcermes,* upon which this Experiment was made, which is fas  
from heing the Quantity of Mercury which several Authors  
maintain may be extracted from Antimony, by raising, it in  
Flowers with Sal Ammoniac, and by reducing these Flowers by  
fixed Salts. I can affirm, by the way, that the Olafs Vessels I  
used on thin Occasion, had never been employ'd in any Process  
where the least Mercury had heen an Ingredient : But *I* must  
at the same time confess, that having repeated the same Pro-  
cess with other *Kermes* of the same Preparation, and the like  
Aqua Regia, I could never see any more Mercury.

The white Powder, in the Middle of which this Mercury  
was found, weigh'd forty-two Grains. I put it into a Retort,  
in order to raise the .Quantity of Sulphur it might contain.

This Sulphur rose with the first Fire, mid adher’d to that Part  
of the Neck of .the Retort, where it comes out of the Furnace.  
Aster wards there appeared a black Circle, then a third 'white  
Circle of the I lowers of Antimony, or rather of die Regulus,  
interspersed with small Needles. The Liquor in the Receiver  
was charg’d with sulphureous Flakes. In sine, the red Mass,  
at the Bottom .of the Retort, was a Species of *Crocus Me-  
tallorum,* or rather a *Magnesia Cpalina,* which is made, as  
is well enough known, with Nitre and Sea-salt. Now in  
this Experiment, I employ’d an *Aqua Regia,* composed of  
the Acid of Nitre, and of the Acid of Sea-falt. These two  
Acids reaffirm’d a Basis in the alcaline Salt of the *Vermes,*became regenerated, and operated during the Fusion ; which  
Effect these two Salts, mix’d with Antimony, produce in  
the ordinary Procefs of the *Magnesia Opalina.* The Regenera-  
tion of these two Salts with the Alcaji of the *Kernses* will he  
more fully prov’d, afterwards. From this long Detail it follows,  
that the Aqua Regia does not dissolve the whole reguline Part of  
the *Kermes,* that, in all Appearance, it only attacks those Par-  
ticles of it, forne of whofe Surfaces present themselves naked to  
the Action of this Acid ; that fucb of them as are cover’d with  
a continued Layer of the sulphureous Matter of the Liver,  
resist the Action of the *Aqua Regia*; that one cannot by means  
of this Acid exactly separate the sulphureous Parts of rhe *Kermes,*because the white.Powder which precipitates from it, contains,  
together with the gross Sulphur, a considerable Portion of the  
Regains, which may well be supposed to make up the half, or  
thereabouts, of this Powder. But notwithstanding this Incon-  
venience, Aqua Regia is the most proper Acid for making the  
Separition of the gross Sulphur which is still naturally in the  
*'Kermes,* for if I employ the Spirit of pure Salt, it corrodes the  
reguline Part, and fubtilizes and attenuates the Sulphur fo  
strongly, that for the most part it evaporates , so that when  
I pour Rain-water upon mis Dissolvent, all the Regulus of the  
*Kermes,* and that which remains of the Liver, and of the idea-  
line Salt, are confusedly precipitated into a white Powder, which  
would he a true Powder of *Algaroth,* (or *Mercurius Vitae)* if  
we had not Reason to sufpect, that it precipitated itself with a  
Portion of the alcaline Salt of the *Kermes.* In fine, there is no  
floating Sulphur separated from this Precipitate, as happens when  
I make use of Aqua Regia..

If instead of the Spirit of Salt I employ the Spirit of pure and  
concentrated Nitre, there happens, so soon as it .is poured upon  
the *Kermes,* fo great an Effervescence, that there is no Doubt  
to be made, but the Mixture would take Fire, if the oily Prin-  
ciple of the grofs Sulphur of this Powder was more disengaged  
from the vitriolic Acid which retains and clogs it. The red  
Vapours of the Spirit of Nitre even become impregnated with a  
Part of this Sulphur, which volatilizes itself during the Effer-  
vescence, since being collected by a Glass Head, or any other  
means, they turn to a Spirit of Nitre of a greenish Tinolure.  
But notwithstanding this great Effervescence, there is no Disso-  
lution of the reguline Part of *sue Kermes* made ; since, if the  
Mixture is allow’d to fettle after the Effervescence is over,  
and if aster this you pour off the Acid which swims above the  
Powder now become white, you precipitate nothing of that  
Regulus by pouting Oil of Tartar upon it.

This *Kermes* becomes white by the Action of the nitrous Acid,,  
and, forc’d by the Fire in a Retort, yields a great deal of burn-  
ing Sulphur, and red Flowers of Antimony, and leaves a whitish  
Masi! of the Calx of Antimony 5 yet this Masts heing still united  
to a considerable Portion of the gross Sulphur of Antimony,  
which it quits with Difficult}', remains a little yellowish, and  
interfperfed with red Points on its Surface. If it is strongly  
forced by the Fire, it vitrifies in some meafiire ; and the Acid  
of the most fixed Sulphur, or even the enure Sulphur, which  
the Fire has not been able totally to expel, forms antimonial  
Needles, with the rest of the reguline Part, which is not hecome  
vitrified. '.

By substituting in the room of Aqua Regia the Spirit of Salt,  
and the Spirit of Nitre, a well concentrated Oil of Vitriol,  
there only enfues a Smeil of Sulphur, which the Fermentation  
augments ; but no gross inflammable Sulphur is separated, as it  
happens, when Aqua Regia is employ’d. We must then use a  
Menstruum capable of dissolving the reguline Part of the *Kermes,*'if we incline to prove the Existence of a gross Sulphur united  
with the *Kermes ;* and this Menstruum or Dissolvent is *Aqua  
Regia.* I now go on to other Operations.

I suew’d, in my former Memoir, that from an AEthiops  
composed of *Kermes* and Mercury, I had a Cinnabar of Anti-  
mony» especially when I employ’d a certain *Kermes* among the  
Number of there I had bought. I can now affirm, with a  
kind of Certainty, that this *Kermes* was chang’d by an Addition  
of common Sulphur, since with the Mercury and *Kermes* of  
my seventy-eight Ebullitions, I could not sublime a true Cin-  
nabar, but a red, fulphureous, ot bituminous Substance, which,  
by a violent Fire, melts and runs along the Sides of the Retort  
like *Spaniso^Tsx* melted, which it refembles in its Colour and  
Lustre. This fame Experiment laid a Foundation for rny ex-  
- amining the following Phenomenon .

I mixed two Drams of my *llerrnes* with two Drams of *yuri*pure Mercury. We have pretty good.Reason to suspect, that  
during the Trituration, which lasted for a considerable while,  
there might have heen some final! Globule of the Mercury lost.  
Nevertheless, by sorting this AEthiops with a strong Fire, two  
Drams and five Grains of Mercury were reviv’d. We can  
only ascrihe this Augmentation of *W*eight to the *Kermes.,* and  
this I had observed in my Experiments made in I 7 34. the’ I  
made no mention of it in my Memoir. I do not from this  
pretend to conclude, that the *Kermes* suppjy’d the Mer-  
cury *I* employ’d with this additional Mercury, but that there was  
an Amalgams formed of five Grains of the Regains of *Kermes*with the two Drams of Mercury. This is ρrov’d by the Mer-  
curys remaining fat, lops shining, and leaving a Tall, as all  
Mercury incorporated with any metallic Substance does. Thus  
this might be a way, tho’ indeed a pretty tedious one, of mak-  
ing the *Amalgama* of Regulus of Antimony and Mercury,  
which is known to be a pretty difficult Affair, and for which  
the late Mr-. *Hamberg* employ’d a Regulus of Antimony, in the  
Preparation of which Copper was an ingredient.

The Mafs of *Kermes,* reduced to a Crocus Metallorum,  
which remained in rhe Retort, being separated from some  
rublim’d Parts of the inflammable Sulphur, ano from some of  
the antimonial Howers, weigh’d only one Dram and thirty-nine  
Grains. I boiled this in Rain-water, in order to dissolve its  
Salt ; and this Lixivium precipitated into a yellow turbitb Co-  
lour the Solution of Mercury in the Spirit of Nitre. Now this  
yellow Colour shews, that I was not mistaken, when, in my  
former Memoir, I advanced, that by the Assistance of a great  
Fire, and by the Interposition of Mercury, which yet only  
serves in this Cafe to divide the different Substances composing  
the *Kermes,* one might disengage from the grofs Sulphur united-  
to this Matter a Portion of the vitriolic Acid essentially join’d  
to this gross Sulphur, transfer this Portion os Acid to a Part of  
the alcaline Salt of the fame Powder, and form by this  
new Uhion a vittiolated Tartar, since in the prefent Expe-.  
riment I precipitate the Mercury into a yellow rurbith Colour,  
as happens when a Solution of common vittiolated Tartar is  
used *for* thatPurposc.

This fame Mass, when its Salts were thus dissolv'd, weigh’d  
only eighty-four Grains and an half, so that there were in my  
two Drams of *Kermes* twenty-seven Grains of a Salt which I  
cannot ascertain to he entirely a vittiolated Tartar, hecause  
there might have still remain’d in it a Portion of the alcaline  
Salt, which might not have been actsd upon by the Acid of the.  
Sulphur. But this Precipitation of the Mercury into a yellow  
turbith Colour is sufficient to prove what I have said upon this  
Point, which is, that the Acid may be disengaged from the  
inflammable Principle, force in the present Case it quits it, in  
some measure, in order to unite itself with the alcaline Salt of  
the *Kermes.* And indeed it is shewn not only by this, bnt also  
by the preceding Experiments, that *Kermes* is a Mixture of the  
Regulus of Antimony, of the grofs Sulphur of that Mineral,  
and of a perceptible enough Portion of alcaline Sale. It is by  
thefe Experiments also shewn,, that this grofs Sulphur may he  
decompounded by Fusion in a strong Fire, as common Sulphur  
is decompounded in the Operation for the Spirit of Sulphur.  
From-this Phenomenon a Reason may be easily drawn, why.  
we cannot extrafl: Cinnabar from this Mixture 0f *Kermes and*Mercury, which is, because in this Operation the gross Sul-  
phur of the Antimony being decompounded, -at least in a great  
meafure, by the Force of the Fire, the Acid, which with th.  
Bitumen of the Earth, or, if you will, an oily Principle, com-  
posed common Sulphur in the entire Mineral, has quitted this  
fat Substance, in order to unite itfejf with the alcaline Salt,  
which greedily receives an Acid, and form a vittiolated Tartar,  
whilst the rest of the undecompounded Sulphur remain’d united  
with the Surplus of the Alcali under the Form of Liver. . Now  
so long as the Sulphur remains united with a fixed Salt, it can-  
not leave it in order to join Mercury, and rise with it in Cin-  
nabar.

There is yet another Experiment which proves this; and tho’  
I have already given an Account of it in my former Memoir,  
yet for the sake of Perspicuity I shall here repeat it. I took  
one Dram nine Grains or eighty-one Grains of *Kermes,* and a  
Dram and an half of corrosive Sublimate; the Mixture, when  
well rubb’d together, was put into a Retort. The Butter of  
Antimony came off first, the Mercury came next, which was  
follow’d by a little Cinnabar sublim’d to the Arch of rhe Re-  
tort, and by a Sulphur which was sublim’d in yellow Flowers,-  
and which burned upon Charcoal. The Mercury reviv’d  
weigh’d seventy Grains, so that there were thirty-eight Grains  
of Acid concentrated in my hundred and eight Grains of corro-  
sive Sublimate, that is, twenty-five Grains and one Third in  
each Dram, exclusive os the Acid which was united with the  
Alcali of the *Kermes,* as I shall afterwards shew. -

We have therefore- no Reason to he surpris’d, if/Sublimate  
is the most corrosive Preparation *of* Mercury, since the red Pre-  
cipitate, for instance, contains only seven Grains of .Acid in  
each Dram. The Mass, almost of a blackish-brown Colour,

which remain’d at the Bottom of the Retort, weigh’d thirty-  
two Grains and an bass, the’ by its Strata it resembled fus’d  
. Antimony ; it nevertheless contain'd fifteen Grains of Salt,  
since after being edulcorated with distill’d Water, it only  
weigh’d seventeen Grains and an half. The Water of this Lo-  
tion gave a deep-greeri Colour to Syrup of Violets, just as a  
Solution of Sea-salt does, the’ it produc’d its Estedt more slowly.  
It makes a white and plentiful Precipitation with the Solution  
of Mercury in the Spirit of Nitre. It produces no Change in  
**the** Solution of corrosive’Sublimate. It precipitates Silver in-  
to a Inina Cornea, and at last, crystallizing, it yields a cubical  
Salt which decrepitates on *Charcoal.* Thus it is a common Salt,  
regenerated by the Union of a Portion of the Acid of the Salt,  
which has quitted the Mercury of the corrosive Sublimate, with  
an alcaline Basis, and this Basis could be nothing else than the  
akaline Salt of the Kermes. This Experiment then is an  
additional Proof, that this Salt is contained in the Kermes.  
It is now my Business to determine how much the Kirmes

..contains of each of the three ingredients which enter its Com-  
position. The preceding Experiments could give me no Satis-  
faction in this Point, but the following feems to decide the Mat-  
ter pretty exactly. I levigated twenty-four Grains of the File-’  
ings of Needles, which I afterwards mix’d in a Crucible, with  
a Dram of Kermes **MINERAL.** The Fusion was made as in  
the common Process of Regulus, and there were *Scorhasasm’d*in it , but during the Fusion there rose to the ‘Edges of rhe  
Crucible, which was cover’d, a white Powder interspersed with  
Needles, which was nothing but Regulus. I separated the *Re-  
gulus* srom the *Scoria,* and found that I hed of it ten Grains  
and an half. When these Scoriae were put into Spirit of Nitre,  
the Iron dissolved, and rhe sulphureous Part of the *Kermes* con-  
tinued separate from the Solution of the ton. - I poured off  
the Liquor, and precipitated the Iron by Galls ; and the inflam-  
mable Sulphur being separated, I then bad ten Grains and an

- half of pure Regulus in a Lump, and near four Grains of Re-  
guline Flowers, which in all amount to fourteen Grains and  
an half.

Two Grains at most made up the Reguline Portion, which  
might heve remained in the *Scoria,* since to me they appeared  
to contain nothing but Iron, alcaline Silt, and Sulphur. Thus,  
according to this Experiment, there must have been sixteen or  
seventeen Grains of Regulus, in a Dram of *Kermes* ; thirteen  
Or fourteen Grains of *alcaline Salt,* and forty or forty-one  
Grains of *common Sulphur.*

I here finish the Examination of *Kermes* made by Ebul-  
lition, and come to consider a quicker Method of preparing  
it by Fusion, observing at the fame time both the Choice and  
Proportions of the alcaline Salt, without which the *Kermes*would neither have-the Fineness, the Lightness, nor the Co-  
lour, which are essential to it. *Mem. de PAcad. R.* 1735.

*Continuation of Mr.* **GE** off **Roy’s** *Observations on* **KERMBs  
MINERAL.**

That no Circumstance might be defective in our Chymical  
Examination of the Kermes **MINERAL,** it was necessary to  
.imitate the Practice of some Chyrnists, who heve substituted the  
Fusion of Antimony with an alcaline Salt, instead of the Ehul-  
lition of that Mi neral with the same Salt . and this will,- at the  
same time, determine the Proportion of Belt necessary to he used,  
for obtaining the *Kermes* as fine, beautiful, and well-colouPd,  
as by means of Ebullition.

In order to arrive at a greater Certainty, with respect to this  
Proportion, I always used *Hungarian* Antimony, very finely  
pulverised, which secllitated its thorough Mixture with the al-  
caline Salt ; and performed all-my Fusions in Giafs Retorte,  
that nothing might be lost of those Substances which might  
separate from the Compound during the Operation. At lest,  
after I bad try’d Experiments with Antimony, I substituted  
instead thereof its Regulus, and put it in Fusion in like manner  
with an alcaline Salt. . ' - '

An Ounce of Antimony levigated, and half an Ounce of  
Nitre fixed by Charcoal, having been well mixed, and put  
in a Retort, yielded a Phlegm with white and thick Vapours.  
The Surface of the Matter, aster forne tone, took a red Co-  
lour, which was a sure Sign, that the gross Sulphur of Antimony  
hegan to unite with the alcaline Salt, and to form a Liver.  
Afterwards it distilled forne Drops of a yellow Liquor, and  
then there appeared, in the Neck of the Retort, a concrete,  
volatile Salt, which was as penctratiog as common volatile Sal  
Ammoniac.

If you have a Mind to separate this Salt, you must take **the**Retort off the File as soon as it is formed, or else the Conti-  
nuance of the Heat, with the succeeding nitrous Vapours, will  
make it disappear . and then the Liquor in the Receiver, heing  
no longer acid or alcaline, smells os nothing but an Empyreurna.  
When you heve taken away the volatile Salt, in order to make  
Experiments of is, and ro ho assured, that it has all its due Pro-  
perties, if you replace the Retort over the Fire, and aug-  
ment it by Degrees, the Matter heaves and puffs up, and be-

comes of a lively Red; over all its Surface, and at last some  
white and farinaceous Flowers ariso to the Top of the Retort.

This Proportion of two Thirds of Antimony to one of fixed  
Nitre, leaves no Regulus in the Bottom of the Retort. This  
I am assured of, by repeating the Operation five or six times.

If you make ufe of equal Parrs of Antimony and fixed Nitre,  
for Instance, an Ounce of each, rbe Mast sooner becomes red  
upon the Surface, runs more equably in Fusion without swell-  
ing, and deposits at the Bottom a Regulus,-which, in this  
Quantity, usually weighs eighteen or nineteen Grains, besides  
the final! Particles which are not reunited to the main Lump;  
but remain dispersed in the saline and sulphureous Scoriae that are  
found aheve the little Mass of Regulos. . -

In performing the fame Operation with two Parts or oneOunce of Antimony, and three Parts or an Ounce and half  
of the fame nitrous Alcali, we shall find, for one Ounce of  
Antimony, forty Grains of Regulus, besides the scatter’d Par-  
ticles. It is remarkable, that more white Vapours are elevated  
with this, than with rhe two preceding Proportions ; and also,  
that more volatile concrete Salt is thence extracted.

That I might render my Account of Procefles on the *Kermes*complete, I try’d the Fusion of Antimony-with other alcaline  
Salts, substituted in the room of Nitre fixed by Charcoal. **I**knew very well, that they all formed a Liver with the gross Sul-  
phur of the Mineral ; but it was necessary to know if there  
were any Difference, and whether the Products were uniform.  
- First then I made use of Nitre fixed by Tartar ; This alca-  
line Salt had been dissolved, filtrated, and afterwards re--  
duced to a white, dry, saline Mast. Half an Ounce of this  
**I** mined with an Ounce of Antimony, reduced, as I sard,  
to a very fine Powder. After the Phlegm there arose red  
Vapours, which had the Smell and Taste of Spirit of Nitre,  
but fasted not long. These were succeeded by white Vapours,  
and these again by a volatile Salt’in a dry Form. When **I**lifted up the Dome of the Furnace, I perceived, that rho’ **the**Salt which I used had, in common Essays, shew’d all the Signs ,  
of a true fixed Alcali, there were yet some Particles of Nitre,  
which bad not been idealised by the Detonation of that Salt  
with the Tartar; for they ran into Fusion anew with the Sul-  
phur of the Antimony, and kindled one after another. This  
Fulmination was much more sensible in another Experiment,  
where I ufed sour rimes the Quantity of the Mixture. I ob-  
served, moreover, that in the Places where the Nitre fulmi-  
nated, it left white Spots, which, taken off with Care, cone \_  
fisted of a diaphoretic Antimony. But I took no Caro to pro-  
secute my Observations this way any farther. .

The Mass which at last remained in the Retort afforded me  
no more collected Regulus, than in the first Operation which I  
made, in the fame Proportion, with Nitre fixed by Charcoal.  
When I augmented the Proportion of the Nitre fixed by  
Tartar, I recover’d a Regulus, as in the preceding Experi-  
ments.

Thus these two Alcalies, proceeding both from fixed Nitre,  
either by means of Charcoal, or Tartar, afford us no percep-  
tible Difference in their manner of acting upon Antimony.  
This, indeed, ought to be the Cafe, but it was good to he af-  
fused of it from Experiments.

.- Let us now proceed to the Trial of Salt of Tartar, which  
we know is the purest of all Salts. When it is well made,  
we find in it nothing of a foreign or of a volatile Salt, which we  
mimost constantly meet with in Nitre, in whatever Manner it is  
alcalifed. This Salt of Tartar, when I used four Drams of it  
with an Ounce of Antimony, separated nothing, at all of a Re-  
gulus ; but every time I repeated the Operation with six Drams  
or an Ounce of that Salt, I obtained forty or fifty Grains of  
sine Regulus from every Ounce of Antimony.

- In this Operation, no volatile Salt is sublimed, because I use  
a pure fixed Alcali, whereas when I rnakeofeof Nitre, fixed  
either by Charcoal or Tartar, I meet with Particles not alca-  
lifed, which still retain all their Acid, These Particles of Nitre,  
completing their Decomposition, abandon their alcaline Salt to  
the Acid of Sulphur, which together mate a kind of vitriolated  
Tartar ; and the Portion of nitrous Acid, when disengaged  
from the other Parts of the Nitre, unites with another Portion  
os the inflammable Principle of Sulphur, and forms with it the  
volatile Salt which I found, and just now spoke of. Perhaps  
we might account for mis in a more simple way, by supposing  
something Ammoniacal in the Nitre; and in this Cafe, rhe Ex-  
plication I just now gave of it would be ofeleso . . .

The Salt extracted by Lixiviation from the calcin’d Lees of  
**Wine,** aster it is dry’d and calcin’d, ought to he a pure Alcali  
of the fame Nature as Salt of Tartar, because it has an Qrigi-  
nal almost like it; and hence also this Salt, bring melted with  
the Antimony, produced no Alteration. There appeared, as  
in the Experiment with the Salt of Tartar, a white Vapour, .  
some farinaceous Flowers, and a salt Liquor somewhat urinous,  
and Inch as I had obtained from a Prooeis with Salt of Tartar.  
Both.of them produce a white Precipitate in a common Sole-  
tion of Mercury in Spirit of Nitre, which Precipitate after-  
wards becomes ?revrfh. As Iona, as J ofed but one half Ounce

of this Sait of Wine-leeS, with an Ounce of Antimony, I sound  
no Separation of a Regulus ; but when I put six Drams, it  
produced forty Grains of ReguluS, as the six Drams of Salt of  
Tartar had done hefore.

It remain'd to know what Effect the Salt of Pot-ash would  
produce. Half an Ounce of this Salt, which had been purify'd by  
a Solution in cold Water, in order to separate it from the vi..  
triolated Tartar which it contained, afterwards dry'd, and then  
mixed with an Ounce of Antimony, shew'd no Sign of vola-  
tile Salt. But the flight farinaceous Dust, which was sublimed,  
as in the preceding Experiments, was of an Orange-colour,  
which shew'd some small Difference hetween this Salt and the  
other alcaline Salts which I had made use of before. The Li-  
quor, convey'd into, the small Receiver, had a weak, volatile  
Smell, and precipitated a Solution of Mercury to a white Coa-  
gulum, which afterwards assum'd the yellow Colour of Tur-  
bith. Hence we may conclude, that it contains 2 little of  
the Acid of Sulphur, which was disengaged during tho Fu-  
sion of the Mixture; and that hesides these Acids, there is  
also in the Liquor a small Quantity of an urinous, volatile  
Spirit, fince it makes a . white Precipitation in a Solution os  
corrosive Sublimate: Besides, after Precipitation, it forms upon  
the Liquor a Pellicle with all the Colours of the Rainbow,  
which is a sure Mark of a sulphureous Acid. In this Operation,  
where we took two Parts of Antimony for one Part os halt os  
Pot-ash, we obtained no ReguluS.

. Being sensible therefore, that this Proportion of alcedine Salt,  
Of whatever Kind it may he, afforded no Regulus, which, when  
that Proportion was augmented, gather'd into a Mass sufficiently  
sensible, I was willing to try what would happen from the Di-  
minution of that Proportion, and, in pursuance of this Reso-  
lution, took but two Drams of Salt os Tartar for one Ounce  
os Antimony.

\_ There was no sulphureous Matter sublimed, but there were  
always some white Vapours ; and that small Quantity of Li-  
quor which passed into the Receiver, was in a flight Degree  
urinous ; the Mass melted in the Retort was half vitrisy’d, and  
the Need.es of the Antimony were totally destroy'd. One  
might compare it to those Livers of Antimony winch are pre-  
pared for Horses, in the Preparation of winch we have heen  
saving of Nitre, in notallowing the common Proportion, which  
is of equal Parts of that Salt and Antimony.

To make it appear, that the Comparison is exact enough, I  
melted an Ounce of Nitre with four Ounces of Antimony in  
a Crucible. The Nitre, in fulminating, carry’d off from the  
Mineral a Part of its Sulphur, and even of its Regulus ; for,  
during the Detonation, there was an Elevation of Flowers,  
and these Flowers were very red. The Detonation being at  
last ceased, I kept the Mixture for some time in Fusion, and  
there remained a *Crocus Metallorum,* resembling that which  
was the Result of my Operation by the Retort t Bur thia last  
had lost nothing of its Sulphur, nor of its Share of Regulus,  
hecause I used an alcaline Sals, which does not fulminate,  
whereas, in the Experiment which I made in the Crucible, I  
. made use of Nitre which fulminated.

. When I augmented the Proportion of alcaline Salts to three  
Drams, for one Ounce Os Antimony, I sound in the Retort a  
reddish Mass nearly of the Colour os Liver of common Anti-  
mony, with its interior Substance divided into little Surfaces,  
striated, in form of Needles, like the Lapis Haematites. Thus  
it appears, that the Proportions of two and three Parts of Nitre,  
to eight Parts Of Antimony, are too weak to open the Anti-  
mony to a sufficient Degree ; for the Mass which remains after  
Fusion, contracts no Humidity from the Ait. There must he,  
at least, four Parts of alcaline Salt to eight of Antimony, that  
the melted Mass may he Capable of Solution; and it plainly  
appears, that it ought to he soluble, and soluble in all its Parts,  
that it may afterwards he capable of precipitating the *Kermes* by  
Ebullition in common Water, without any Separation of its  
Portion of Regulus.

This Proportion heing settled as the Standard, throughout  
all the Experiments which I made, most of which I have sup-  
pressed, that I might not make this Paper of an unnecessary  
Length, I go on to examine the *Karines* precipitated from Mas-  
ses capable of Solution.

I Iooil'd them two Hours, or thereabouts, in two Pints of  
Rain-water, and when the Liquor was reduced to Half, or a  
Quarter, I filtrated it. It must he observed, that, in the Time  
Of Boiling, the Liquor had a very sulphureous Smell, and shew'd  
Signs of something Volatile and urinous, as in the simple Ope-  
ration on the *Kcrmes,* performed in the ordinary way by  
Ebullition.

. \_ The Liquor, having been filtrated boiling-hot, thro\* a double  
Paper, into a China Bason, into which, by way of Precaution,  
J had before poured two Pints of boiling Water, for Reasons  
which I shall declare hereafter, aS it cool'd, them wag com-  
monly precipitated a red Powder. I decanted and filtrated the  
cold Liquor, and poured it again upon the Residuum, and  
boiled them together ; I filtrated again, and repeated the Boil-  
ing and Filtration three times.

AS to the Massas, which contract not the least Humidity  
from the Air, aS those where I put hut three Drams of alca-  
line Salt to an Ounce of Antimony, after long boiling, there  
was precipitated nothing but a gross Magistery of the Colour of  
Oker, winch is always the Colour of *Kcrmes,* when it is  
ill prepared, whether it be by Fusion, or in the ordinary Way,  
by simple Ebullition. This proves, that the Proportion of  
three Drams of alcaline Salt to an Ounce of Antimony is no  
good Proportion. ’

The Mass which results from hence, is to be look'd upon as  
a *Crocus Metallorum,* since we also find some Particles which  
resemble it upon the Filtre. 'Tis true, if we repeat the Boil-  
ings, and add a little alcaline Salts to each Boiling, we shall  
come at last to reduce the whole Mass to a colour'd *EArmes ;*but the Work would be as long aS «hat I spoke of in my pre-  
ceding Memoir, and the Chymists, who prepared the *Kersnes*by Fusion, had no other View than to shorten this Labour.

However, tho' this Proportion be not sufficient to reduce  
Antimony to a *Kermes,* it opens it enough to render it os some  
Service in Ptisans made of the sudorific Woods, in which it is  
customary to boil crude Antimony ty’d up in a Knot, without  
considering that it can communicate nothing to the Decoction,  
is it be not first open'd by some acid or alcaline Salt. For this  
Reason a famous empiric, whose Ptisans were in great Repute  
during his Life, prepared his Antimony by Fusion with Salt of  
Wormwood, and then boiled it with the Woods.

If the Liquor be too much evaporated hefore Filtration, there  
is precipitated, during Refrigeration, a gross Matter like a gru-  
mous Mucilage ; hecause the *Kcrmes* is not dispersed in a suffi-  
cient Quantity of Liquor to admit of its precipitating by De-  
grees ; besides the Concentration of the alcaline, saline, sul-  
phureous, and reguline Liquor in this Case, the great Quan-  
tity os Sulphur, collected into too small a Space, is much more  
disposed to reunite, and the Molecules of this Sulphur, approach-  
ing one another, form, in spite of Lotions, a kind of resinous .  
and shining Covering upon the Mass of these Magisteries, which  
is Very perceptible aster drying. '

’ But the Proportion of alcaline Salt being fuch as is agreed,  
and such as my experiments have taught me, there is no greater  
Quantity of Liver formed than what is necessary to divide the  
Reguline Part, to reduce it into Particles fine enough to pass  
thro' the Pores of the Filtre, and to keep those Particles clean  
and free from that glutinous Pellicle, which would reunite them  
in gross Molecules, and.render the Precipitation grumous. Be-  
sides, if there he too much alcaline Salt, the Excess of that  
Salt reduces the Regulus; and this ReguluS, so reduced, is  
purely lost, as to the *Kermes,* the Preparation of which we have  
in View.

In order to remedy this Inconvenience, of the too sudden  
Coalition of the Partides of the *Kermes,* I pus, aS I have already  
said, boiling Water into the Bowl placed under the Filtre, that  
if the Evaporation of the Liquor has been carry'd too sar, the  
Salt, winch by that means alone would he too much concen-  
trated, may extend itfels afresh in this warm Water, and he-  
come more capable of keeping the Parts of the Antimony,  
which it has attenuated, at a Distance from each other. This  
Method I propose, retards the Condensation occasioned by the ..  
Cold of the external Ain, winch, without this, would be too  
sudden. And, indeed. Experience has convinced me, that, by  
this means, the *Kermes* was precipitated much finer, and of 2  
much more lively Colour, than when I put no boiling Water  
into the Bowl. Besides, the *Kermes* must be dry’d in the Shade,  
because a too brisk Heat makes the Particles os the Sulphur  
coalesce, and form the above-mentioned Varnish.

I shall not give the Preference to any one of the SaltS in  
particular which ! employ'd in these Processes of the *Kermes* by  
Fusion, because, with each of them, I procured a Magistery  
equally beautiful, when I us’d them in the same Quantity.

I have also observ'd, that whatever alcaline Salt I employ’d,  
whether in the PrepartIon os the *Fcermes* by Ebullition, .or by  
Fusion, there was always a considerable Quantity os white  
Earth, separated from the Mixture when diflblved in boiling  
Water. I have spoken of this Earth in the former Part of this  
Memoin

From all I have said, it should seem, that the precise Quan-  
tity of alcaline Salt, which must be mix'd with two Parts of  
Antimony, in order to reduce it to a fine *Eerrnes by* Fusion,  
cannot be discovered but by making Experiments. I confess  
it was in this Manner that I arrived to a Certainty about it;  
hut I might have also discover'd it, by reflecting on the Analogy  
which this Process bears to the common Manner of preparing  
the *Livcr of Sulphuri* which, if well made, ought to diflblve  
Gold by Solution, or render it, if I may so speak, soluble, so  
that it may pass thro' the Filtre, when the Mixture has been  
dissolved in Water : Now this Proportion of a Liver of Sul-  
phur, well prepared, consists in equal Parts of alcaline Salt and  
Sulphur mix'd together; and the entire Mass, resulting from the  
Mixture, dissolves totally in Water, without any Part of the  
Sulphur separating from it. The Truth of this is well enough  
known ; but however exact the Analogy, or, rather, the Re-

lation hetween these two Processes may be, it was still necessary  
to know the precise Quantity, or at least Very near so, of the  
inflammable Sulphur that Antimony can contain. This can no  
otherwise be done, than by finding by different Experiments,  
what Quantity of common Sulphur must he used in order to  
restore a purified Regulus to an Antimony richly furnished with  
Needles. This Attempt I myself made; however, I wave  
in Detail of my several Essays for that Purpose. By making all  
my Experiments in Retorts, that I might lose none of the Mix-  
tnre, I was assur'd, that by mixing two Drams of Sulphur  
with one Ounce of Regulus, we shall find a Piece os Antimony  
regenerated, with beautiful Needles, and which does not differ  
from the hest chosen *Hungarian* Antimony, without any Part  
of the Sulphur being sublim'd, or raised to the Neck of the  
Retort, which happens when a larger Quantity of it is used.  
There is still another Method of ascertaining the Proportion of  
Sulphur contained in Antimony, which I shall reserve for  
another Memoir, where I shall lay down the Method os try-  
ing Antimony, and the distinguishing Characteristics of its Pu-  
rity.

Not satisfied with having regenerated the Regulus into a true  
Antimony, by a just and exact Proportion of Sulphur, resem-  
bling a Piece of well-chosen *Hungarian* Antimony, to which I  
chose to compare it ; I made use of this regenerated Antimony,  
in order to make *Eermes* by Fusion: I took an Ounce of it re-  
duced to Powder, Io which I added half an Ounce of Nitre  
fixed by Charcoal; and I had the same Sublimations, and the  
same Masses, I used to have, when I made use of *Hungarian*Antimony. All the Difference I could possibly observe was,  
that the Substance was more difficultly fused, and the Mass was  
of a more brownish Colour ; but when I dissolved *it* in boiling  
Water, a Magistery precipitated from it almost as beautiful as  
when *Hungarian* Antimony was used.

After the entire Precipitation of the *Kermes,* the Liquor or  
Lixivium yielded me a white Earth perfectly like that before-  
mentioned.

That I had given the Regulus the Proportion os Sulphur,  
necessary to regenerate it into Antimony, is proved from this,  
that if there had not been a sufficient Quantity of it, I should  
have found a Regulus in melting tins Antimony with half rho  
Quantity of alcaline Salt; because an alcaline Salt does not de-  
stroy the Regulus when it acts alone. Is, on the other hand, there  
had been too much Sulphur, its Excess would have been sublim'd  
in Flowers during the Regeneration. Now in order to shew,  
that the alcaline Salt alone does not attack the purisylol Regulus,  
and cannot separate from it a Magistery like the *Kermes,* let it  
only be observed, that if we melt Powder of Regulus mixed  
with fixed Nitre, the unfixed Part only of that Saltncts by fuI-  
imitating gently, and reduces the Parts of the Regulus, which  
touch it, into a Powder of a yellowish Colour, which is a  
Species of *Diaphoretic ,* the Remainder *os* the Regulus is fus'd,  
and rises above the Salt in little Drops, which being collected  
by the Solution of the Salt in the boiling Water, amounted al-  
most to the Weight of the Regulus employ'd; what is want-  
ing of it, is that Part of the Regulus which has been reduced  
to a Diaphoretic by the momentaneouS Detonations; and from  
the Solution of the Salt, not one Particle of *Kcrmes* is preci-  
pitated. The whole Process is finished without any sensible  
Loss of the Regulus, if, instead os the fixed Nitre, we employ  
a purer alcaline Salt, such as that of Tartar: But the moment-  
aneous Detonations prove, that in the common Process of the  
Regulus, the Regulus itself, however well purified it may have  
been by reiterated Fusions, still contains a considerable Portion  
of sulphureous Matter, more subtile indeed than the gross and  
inflammable Sulphur separated from it; but which is still suffi-  
cient to make the Nitre, which is not alcalized, fulminate; and,  
in all Probability, this sulphureous Principle is the Vehicle of  
the rigid Parts of the Vitrifiable Earth, and assists them to sti-  
mulate and twitch the nervous System, and thereby produce  
Vomitings.

Having then shewn, that the alcalined Part of the fixed Ni-  
tre does not attack the Regulus during the Fusion, we have  
no Reason to be surprised, that the *Deliquium of* the same does  
not act upon this Regulus in'‘the Ebullition, and that from  
a Pound of Regulus we can scarce separate and disengage one  
Grain of *Isermes.*

From all I have said, I conclude, that in order to procure  
*Kermes* by Fusion, we must employ a Very pure fixed alcaline  
Salt; that the Proportion of that Salt is, one Part to two Parts  
of Antimony reduced to a fine Powder, that they may be the  
more intimately mixed ; that the Mass drawn from the fused  
Mixture aster it is reduced to a Powder, when hot, ought to  
he put into boiling Water, and remain in it for an Hour or  
two, before it is filtrated ; that there ought to be boiling Wa-  
ter in the Bowl which receives this saline and antimonial Liquor,  
for the Reasons above-mentioned ;.. that every Ounce of Anti-  
mony, thus treated, yields, after three Ebullitions of the Mass  
dissolved in Water, from five Drams sixty Grains to six Drams  
thirty Grains of *Kcrmes,* almost aS beautiful as that which is  
yielded by Ebullition, according to the Process published bv the

King’s Order; that it is not nevertheless so smooth to the  
Touch, and that it wants that downy Softness, which is al-  
ways the distinguishing Characteristic of that which is prepared  
simply by Ebullition: As to the Effects heth of the one and  
the other, considered as a diaphoretic Medicine, I believe them  
perfectly alike.

I have said, in the Beginning of the first Part of this second  
Memoin, that from Antimony treated by Acids, we might have  
a Remedy, which, if exhibited in a small Dose, should produce  
the same Effects with the *Kermes : As* the Preparation os it is  
very easy, it might be substituted in its room, especially in the  
Hospitals. ' In this Case, Acids act upon this Mineral in the  
following manner:

I took for my Experiments *Hungarian* Antimony, split into  
Laminae, according to the Direction of its Needles, that .1  
might the better observe the several Phenomena that should  
occur.

Neither the white and concentrated Oil of Vitriol, nor that  
winch has been weakened and diluted with common Water,  
act, when cold, either upon these Laminae of Antimony, or  
upon the Pieces of Regulus ; this Acid only darkened the  
Lustre of the shining little Surfaces of the Regulus. But if we  
put into a Retort half a Dram os the like pure Regulus, and ’  
pour upon it sour Parts or two Drams of white and concen-.  
Hated Oil of Vitriol, with the first Degree of Heat, the Oil  
Of Vitriol will become brown, a suffocating sulphureous Smell  
will arise from it, which will augment in proportion as the  
'Regulus is penetrated and corroded by the Acid ; for there is  
no true and real Diflolution happens to it.

By augmenting the Fine, an apparently mucilaginous Matter  
is separated from it; and when the Ost has begun to boil, the  
Regulus is reduced into a white saline Mass, just as it happens  
to Mercury in the Process for Turbith Mineral; a true Sulphur  
is sublimed, or raised to the Neck of the Retort; and lastly,  
all the Oil of Vitriol passes into the Receiver, and leaves in the  
Retort the Regulus reduced to a white, tumified ,and salineMass :  
The Fire being extinguished, I separated the Retort from its  
Receiver, and as soon as the external Air enter'd, there burst  
out a sulphureous Vapour as white and thick aS the Steam of that  
Liquor, which is prepared with corrosive Sublimate and Tin.

The white and saline Mass remaining in the Retort weigh'd  
seventy Grains ; so that it had augmented thirty-four Grains,  
winch must have come from the Vitriolic Acid which was con-  
centrated in the Regulus ; and the Oil ofVitriol, conveyed to  
the Receiver, had lost almost as much, and had, besides, be-  
come considerably less acid. This saline Mass to me appeared tO  
be .too much of a caustic Nature for internal Use.

" I did not perform this Experiment with Antimony, hecanse  
it is described in the Observations of *Frederic Horseman,* and  
because I could say no more concerning it than he has there  
done.

The purest Spirit of Salt does not act sensibly either upon  
Antimony, or its Regulus; but it disengages, the' flowly, from  
Antimony reduced to small Pieces, some light sulphureous  
Flakes.

The Case is not the same with the Acid of Nitre; it attacks \*  
by little and littie these *Lamina* of Antimony, and there arise  
from it a great many Bubbles of Air; the Spirit of Nitre,  
during this Fermentation, gradually assumes a greenish Colour  
with a faint Cast of Blue; and if more of this acid Spirit  
than is necessary is not put into the Vessel, it is almost wholly  
absorb'd by these *Lamina,* which it penetrates, and separates  
from each other, according to the Direction os their Needles.  
If there is too much of this Acid, that is, if it swims above the  
Antimony, it destroys these *Lamina,* and reduces them to a  
white Powder.

But if the Absorption of this Acid is flowly made, \*we dis-  
cover among these distended Laminae, littie saline and transpa-  
rent Crystals, which grow gradually in the same manner with  
the *Pyrites,* in winch we often perceive littie Crystais of Vi-  
trial, which have not as yet assumed Very determined Shapes  
and Figures. These little Crystais of the antimonial Laminae ‘  
are intermixed with the yellow Parts, which, being carefully  
disengaged, burn like common Sulphur.

I used all nay Endeavours to separate a certain Quantity of  
these little Crystals, but my Attempts were in vain ; for chey  
disappear soon aster they are formed, and are apparentiy cover'd  
with a white Powder or Magistery, which is successively form'd  
in proportion as the Acid of the Nitre disengages and separates  
the spiculated Particles css the Antimony. But though I can-  
not shew these little Crystals formed by the Union of°the Spirit  
of Nitre with the Antimony, the Formation of thet nitrous  
antimonial Salt is not for that Reason the less real. Besides, I»  
find the like Appearances, when I substitute the Regulus in-  
stead of the Antimony itself. A good dgni of Attention is  
nevertheless requisite to separate these Crystais ; as soon aS the  
Ain acts upon them, they lose their Transparency ; and if the  
Regulus is allow'd to reduce itself into a Magistery to a certain  
Degree, they are no longer distinguishable.

Thus, in order to observe these Crystals, st is necessary to  
break the Regulus into Pieces, to put these Pieces into a small  
glass Vessel, and pour Spirit of Nitre upon them, to the half  
of then Height only, that they may not be all covered by it.  
This Acid penetrates them, makes them exfoliate into white  
Scales; and it is upon the Surfaces of these Scales that these  
white unpolished Crystals are formed. These Crystals grow  
and increase, in the Form of Collyflowers, in the Space of two  
or three Days. It is then necessary to withdraw them, that  
they may not be confounded in the white Magistery, which is  
still forming itseif, and winch would prevent their bring distin-  
guished.

The Spirit of Salt, which alone does not appear to attack  
the Antimony, yet reduces it to a white Magistery, when Spirit  
of Nitre is added to it. But the Mixture of these two Acids  
with this Mineral produces no Appearance of Crystais. The  
Laminae of the Antimony soon become yellow, and very foetid;  
nitrous Vapours rife from them, and yet the acid Liquor does  
not seem to retain a great many Parts of the Mineral; os, which  
amounts to the same, it very quickly precipitates what it had  
retain'd ; after which. Oil of Tartar, poured upon it, no longer  
produces any Precipitation.

Thus 'tis not enough to say with some Chymists, that Aqua  
Regia is the Dissolvent of the reguline Part of the Antimony;  
we must add, that the Aqua Regia ought to be poured upon the  
Antimony and its Regulus in largo Quantities. Besides, the  
Aqua Regia, which produces this Dissolution, ought to be com-  
posed of four Parts of the Spirit of Nitre, and one Part of  
the Spirit of Salt. The Spirit of Nitre, converted into Aqua  
Regia by Sal Ammoniac, does not dissolve without Precipita-  
tion, as this Aqua Regia does.

In two Ounces of an Aqua Regis, composed as I have now  
said, I dissolved a Dram of Regulus broken in small Pieces; and  
that the Dissolution might be made without a Precipitation, I  
was oblig'd to wait till one small Piece was totally dissolved, be-  
fore I put in another. The Experiment takes up a great deal of  
Time; but 'tis reasonable to have recourse to all Means, in order  
to satisfy ourselves of a Fact which may be contested. 'Tis ne-  
cessary I should also observe, that this Liquor, in proportion as  
it is impregnated with the Regulus, assumes a beautiful gold  
Colour, which it insensibly loses by the Evaporation of the  
white Vapours which are continually rifing.

The same Aqua Regia, used with the same Precautions, also  
. dissolves in Antimony the regulinePart, which is in the Pieces os  
thisMineral, when thrown into it one aster another. The Dissol-  
vent having carried off this reguline Part, the remaining Pieces  
of Antimony, becoming by that means lighter, swim above.  
If we take them off, and examine them, we shall see, that they  
are Part of the Sulphur which the Antimony contained.

. Hitherto I have sound nothing but this Aqua Regia, composed,  
as I have said, *of* four Parts os the Spirit of Nitre, and one  
Part of the Spirit of Salt, employ'd to the Weight of sixteen  
Drams upon one Dram of Regulus, and upon a somewhat less  
Weight of Antimony, which occasions a total or complete  
Dissolution of the Regulus; whereas the Spirit of Nitre, made  
with Sal Ammoniac, quits, and soon allows the small Quantity  
of ReguluS it had dissolved, to precipitate, as the late Mr.  
*Lemery* has observed.

Mr. *Lernegry* made many Experiments with this Magistery ;  
and I am surprised the Use os it is not continued in Hospi-  
tals, and Country Pisces, where this Remedy, which costa little,  
and which is easily prepared, may be substituted in the room  
os a great many other antimonial Medicines, more difficult to  
be prepared. I have often observed, that the Precipitate of  
Antimony produced by.the Spirit os Nitre, when well edulco-  
rated by several Affusions of boiling Water, purges and Vomits  
like *tffiC Kerrnes,* when given in a Dose of three or sour Grains.  
I have also observed that prepared by common Aqua Regis, '  
when well washed, to operate by Stool, if given in the same  
Dose ; and that a Grain os it, given sor a Dose, operates aS a  
Diaphoretic. Many poor Peoples Children, attack'd with Dis-  
orders, Obstructions and Fevers, have been first relieved, and  
afterwards throughly cured, by taking a Grain of this Medicine  
for a Dose. Besides, it may be swallowed with less Reluctance  
than any other Preparation which should be either unpalatable.  
Or more bulky. *Memoires de VAcad. Raeyale,* I735.

*Continuation of Mr.* Geoffroy’s *Remarks on* **ANTIMONY.**

. In the Memoir which J road last Year upon the *Kermes,* I  
obliged myself to examine what might be the Quantity of com-  
mon or inflammable Sulphur, which the different Antimonies,  
which we meet with in *Parti,* contain; and, at the same time,  
to determine he Qpantity os pure ReguluS, which might be  
expected from that Mineral by Operations attended with less  
Loss, than in the ordinary Methods.

Such an Inquiry is the Subject of this Memoir, and that you  
may know hefore-hand what I design to illustrate, my Business  
shall he,

i. To reduce Antimony to a Calx, as much desulphurated as

Possible, in order to know, by the Diminution of the Weight,  
how much Sulphur is evaporated, I mean inflammable Sulphur.

2. To make it appear, that every Calx of Antimony, that  
is well exhausted os inflammable Sulphur, is scarce any more  
than a Regulus; and that what is not such is an Earth, which  
may be regarded as foreign to that Mineral, and a Remainder  
of Sordes, from which it was not throughly purg'd in the Fur-  
nace.

3. To propose a Method whereby we may obtain a much  
greater Quantity of Regulus from Antimony, of whatever Kind  
it be, than by the way of Process so celebrated by M. *Stahl,*and by those that have copy'd it from him. And,

4. lastly. To teach a way os purifying theReguluS, without  
an Addition os Salts, and with inconsiderable Loss.

All this supposes long Details, but then these Details will be  
accompany'd with Observations which will render them the  
more supportable. And tho’ the Means which I use may not  
be proper for those who perform these sorts os Operations by  
the Great, and have nothing in View but to work quick, and  
to get Money by it, yet they who prefer Exactness before such  
Views, will, perhaps, thank me for my Labour.

We commonly meet with three Sorts of Antimony in this  
Place *(Paris):* One comes from the old Mine of *Auvergne*this, as it was formerly worked, was so salt, and so littie de-  
purated, that it was used in nothing but gross Preparations, and  
it was almost impossible to make the diaphoretic Antimony os it.  
This grew out os Use, and the *Antimony of the new Manu-  
facture* became in Repute, which, for Purity, may vie with the  
choicest *Hungarian* Antimony. If the Undertakers, who  
work that Mine, continue to furnish uS with as good Antimo-  
ny, as that upon which I have performed my Operations, and  
is the Mine be rich, we may be almost sure, that there will he  
no Occasion to get it from *Hungary,* which would be a consi-  
derable Advantage to the Kingdom. Those Authors who have  
written best upon Antimony, generally say, that this Mineral  
ought to yield about half its Weight in a ReguluS ; but it is  
possible to obtain a for greater Quantity. This I shall prove in  
the Course os this Memoir, by describing the different Methods  
which have been most successful in collecting the Reguline Part  
os Antimony into one single Mass.

While I was in the Course os my Essays on the Reduction  
os the various Preparations os Antimony, I discover'd by chance  
a new Phosphorus, being a Preparation os Antimony, which  
fulminates with a Noise and Explosion, as soon as it comes in-  
to Contact with the Ain; this I try'd by repeating the Opera-  
tion several times one after another, and always with the same  
Success. I believe the Invention is new, and I shall give it aS  
such at the End of this Memoir.

According to the Order of operating, os which I have al-  
ready given an Account, I begin with the calcining of Anti-  
mony. I have nothing to add with respect to the ordinary  
Method of Calcination, except that the finer this Mineral is  
pulverized, the better does the common Sulphur evaporate from  
it. The Reason os this is obvious : I always made use of it  
thus prepared : As I was to compare the Weight and Colour  
of the Calxes of different Antimonies, it was necessary for me  
to fix an equal Time to each Calcination of an equal Quantity  
*of* every one of those Antimonies. ;

I found by Experience, that tenJIours was the most conve-  
nient Time for the perfect Calcination of twelve Ounces of  
this Mineral pulverized. The Proportinn os Fire was not so  
easy to be fixed ; however, I came as near to it as possible, by  
using in every Calcination, the same Vessel, the same Furnace,  
and the same Quantity os Charcoal, and employing the same  
Operator, who always kept stirring the Powder os the Anti-  
mony, to prevent it from running into Lumps.

It may be proper to observe in this Place, that the Vapours  
*os* Antimony are not so dangerous aS is generally imagined, and  
as they would really be, did Antimony contain an arsenical  
Sulphur, as most of the *German* Chymists pretend ; for the  
Person whom I employ'd in this Work, perform’d above fifty  
Calcinations, almost continually one- after another, without  
feeling the least Inconvenience, tho' the Chimney, under which  
the Furnace was placed, was none of the best for drawing of  
Smoke. .

The different repeated Calcinations of *Hungarian* Antimony,  
of which I always took the Weight of twelve Ounces, being  
the Quantity which suited the Capacity of my Vessel, constant-  
ly reduced that Mineral to nine Ounces two Drams, and some-  
times to nine Ounces three Drams.

The same Number of Calcinations of the old Antimony of  
*Awvergne* made greater Variations. I had Calxes which weigh-  
ed ten Ounces wanting twelve Grains, some ten Ounces one  
Dram, others ten Ounces three Drams. I also bought this old  
Antimony, which I calcined, from different Shops. These Va-  
nations do not proceed from the Time of the Calcination, which  
was always the same, nor from the Degrees of Fire, aS you may  
see by the Precautions which I always took Io keep in nearly  
equal. I can impute them therefore to nothing but the greater  
or less impurity of those different Antimonies purchased of diss

ferent Druggists ; for tho' they all came from the same Mine,  
'tis plain they were smelted at different Places. By *Impurity* here,  
I mean, that Portion os Sordes which is more considerable in  
them than in those Antimonies which we call pure, and remains  
fixed in the Fire without diminishing its Weight ; because, he-  
. . ing a pure Earth, it contains no Matter for Evaporation.

The . Calcinations of the Antimony of the new Mine, or  
new Manufacture, reduced the Calx to nine Ounces two  
Drams and an half, nine Ounces three Drams, and nine Ounces  
four Drams; so that I may with Reason affirm, that it was al-  
most as pure as *Hungarian* Antimony. Besides, the Calx, when  
shipp’d of its Sulphur, is of a light-grey-ash Colour, like the  
Calx of *Hungarian* Antimony, whereas that of the old Anti-  
mony of *Auvergne* is of a much more brownish Colour: The  
Purity of the Antimonies we are now examining, is known  
from whet I have now said, concerning the greater or less Loss  
they sustained during Calcination ; the inore it loses, the more it  
contains, *cceteris.paribus,* os common Sulphur, which, as is  
fufficientiy known, is an essential Ingredient in the Compost-  
tion of this Mineral; and the less it loses, the more it contains  
os heterogeneous Parts, which do not yield to the Action os the  
Fine in Calcination ; that is, its Fusion has been ill performed,  
or the Mine from which it has been taken; has been very poor. -  
There is no Occasion for my inlarging further on this Observa-  
.tion. The thing required was to arrive at a Certainty, that  
these Calxes of Antimony were as throughly divested of Sulphur  
as they could possibly be ; for this Purpose I calcined them  
with Nitre; their Detonation was more languid than that of  
the Regulus.treated in the same manner, for the same Space os  
- Time, by the same Fire, and with the same Salt. The Mass  
thrown into the Water yielded me a diaphoretic Mineral full  
as white aS the Diaphoretic prepared with Regulus, and almost  
in the same Quantity, which Circumstance contributes in some  
measure to prove, that the Calx os a good and well prepared  
Antimony is all Regulus; and that, in order to make it so,  
nothing is wanting but to collect its divided Parts.

These same Calxes with corrosive Sublimate, in the Propor-  
tions ordinarily employed to make Butter *os Antimony,* are  
with Difficulty attack'd by the Acid of the Sublimate.

. TheTranflation of this Acid from one Matter, so aS to lodge  
it upon the other, is so dissicultiy performed, that.only a very  
small Quantity of Butter os Antimony is distill'd : .The Re-  
mainder of the Sublimate is sublim’d afresh. There arises  
neither Cinnabar nor Sulphur, hecause these Calxes are entirely  
divested of the latter of these. But why, may one say, does  
not the Sea-salt act upon this Calx ? Why is not the Tranfla-  
lion I have spoken os,, made ? I answer, that this happens, be-  
cause in calcining the Antimony there is a Commencement of.  
Vitrification, and because the greatest Quantity of the Particles  
Of the Calx being covered with a Stratum of Glass, the Acid  
flips over them without finding any Pores at which it may enter;  
and is it has reduced any small Portion os it to Butter, 'tis he-  
cause this small Portion has not been vitrified. This may also  
probably happen, because a Portion of the Acid os the Sulphur  
IS concentrated in the Calx, in winch Case the Acid os the Sea-  
salt could not attack it.

By the common Method os preparing Regulus, too well  
known to stand in need of a Description here, the late Mrs  
*Lemery* extracts six Ounces one Dram of it from each Pound  
os Antimony. Mr. *Stahl,* in his Tracts, sayS, that a fourth  
Part of it is only extracted when we use equal Parts of Tartar,  
Saltpetre, and Antimony ; but that the Product of the Regu-  
lus is more considerable, if to fix Ounces of Antimony we  
add five Ounces of Nitre, and fin Ounces of Tartar. . Then  
♦ he subjoins his Discovery, which consists in separating or re-  
ducing the Antimonial Powder from the Scoriae, hy casting  
them into the Crucible with half then. Weight of Nitre, in  
Order to make a gentie Detonation, and by throwing .Powder  
Of Charcoal upon them immediately aster. We shall, continues  
he, by this second Operation, have another Regulus, which shall  
almost be equal inWeight to the Regulus first extracted from it.  
But he does not precisely determine the Weight of that first Re-  
gulus: Besides, this Process is difficult; there are two De-  
tonations, and consequentiy some Loss. The Sulphur is so  
intimately united with the crude Antimony, that in .these De-  
tonations of the Nitre with the Tartar, especially in the  
first, a considerable Portion of the Antimony is carried off  
partly in Smoke, and Part of it entire, whilst the other Par-  
ticles snipp’d of the Sulphur which they contained, by Deto-  
nation, collect themselves into a Regulus.

I myself went otherwise to work, and quitting my Supposi  
lion, that the Calx *os Antimony is* a ReguluS divided into ex  
iremely fine Particles, my Business was only to find a Dissol-  
vent or Reductive, which might at one and the same time re-  
store to the Particles of the Calxes, too much stripp'd of the  
Phlogistic, that inflammable Principle in which they were de-  
fective, and reduce itself into a Flux, liquid enough for allow-  
ing these Particles to pass through it easily, and precipitate be-  
low it by then proper Weight ; and that, heing thus precipi-  
tated, the Reunion should be made by Fusions I have tried

the reductive Salts, the Olis, the Fats; but nothing thas shoe  
ceeded so well with me as black Soap. This Reduction is also  
made by Charcoal; for .nothing ought to he omitted, and  
Charcoal is even a Reductive employed, in the Preparations of  
Regulus, in great Quantities. AS for the Oils and Fats, they  
reduce also ; hut they ferment too much, and inflame; and as  
they are reduced to a Coal, no fluid *Scoria* are form’d ; what  
floats above .the Antimony in the fluid Part is rugged and .  
coarse, and the fused Mineral being naked; the Evaporation of  
it is carried on with a considerable Loss. . s.

. Nitre too quickly carries off the Sulphur of the Antimony in  
Detonation : Besides, 'tis known, that it reduces it to a Dia-  
phoretic ; and we cannot afterwards reduce this Diaphoretic  
into a Regulus, without a great deal of Loss to the whole  
Mass os the Antimony, with which the Operation has heeii -  
begun. ... ...

Salts already alcalized; when fufed with the crude Antimony, .  
reduce it into that. Form which we call *Kermes by Fusion,* or  
*Golden Sulphur os. Antimony* ; is they are fused in equal Quan-  
tities with the Calx of the Mineral, they reduce it ro a Species  
of Glass. *- ’ i - '* . Ἀ . . . I

Red Tartar; or white Soap, may he employ'd; but I have  
found, that neither the one nor the other collected so much of  
the Regulus as black Soap. I wave an Account of the Essays  
of this Kind I have made, in order to avoid a superfluous  
Prolixity: I shall then confine myself to this Reductive. 'Tis  
well enough known, that it is composed of a strong and whitish  
Lixivium os Pot-asu and Quick-lime; united by Ebullition to  
Lin-seed Oil, Rape Oil, Hemp-seed Oil, and sometimes evert  
to Fats. I am not indeed the first who used this Method; for  
I have seen in the *Engli/h* Edition of Sir *Kenelm Digbfls* Chy-  
mical.Experiments, that this Philosopher recommended Soap  
and Tartar, for the Reduction os a ReguluS of Antimony,  
which he calls *Spirituous* ; and which, according to him, is the  
precipitated Butter of Antimony, and the Mercury probably  
reunited ; sor he says no more os it. Whatever the Caseis;  
if it was a Reduction of the *Mercurius Vira,,* which he was '  
talking of, the Soap was sufficient without the Tartar;

But since black Soap is so good a Reductive os the Reguline  
Part of Antimony, it may be aiked, why this Mineral is cored  
Verted into a Calx in order to reduce it afterwards, and why  
the Powder of Antimony is not mixed all at once with the Soap,  
fince by this means the Operation would be less tedious; As *I  
was* apprised before-hand of this Objection, I prepared myself  
to answer it by an experiment, which proves, that crude Anti-  
mony does not yield, eVen with this Reductive; all the Reguliin  
that may be separated from it by my Method. I took two  
Ounces of *Hungarian* Antimony; like to that which I had  
reduced to a Calx ; when reduced to a fine Powder, J mixed it  
with two Ounces and an half of black Soap, and had a Masi.  
of ReguluS well reduced, and very clean, het it only weighed  
two Drams six Grains ; so that two Ounces sorty-eiobt Grains  
would be yielded by each Pound of Antimony. By the Proa  
cess of Mr. *Stahl,* seven Ounces and an half, or at most, eight  
Ounces, can only he extracted; and by mine, I have very near  
ten Ounces, as may he seen afterwards. Thus the Soap, which  
well enough reduces the Calx os the Antimony, cannot in the  
least separate.the ReguluS of that Mineral when crude.

The Scoriae winch float above this small Part of the collected  
ReguluS, are, when cold, a sort of black compacted Glass;  
which resembles Jet, mehs at the Flame of a wax. Candle,  
like Bitumen, and diffuses a sulphureous Smell; These Scorise;  
winch do not become moist by being exposed to the Air, would  
have been of the Colour of Liver of Antimony, if the alcaline'  
Salts, which are contain’d in the Soap, had only been employ’d;  
But in using the Soap, we see its oily Part must burn, unite  
itself to the Acid os the Sulphur of the Antimony; and with it  
form a Bitumen: The alcaline Salt is covered and wraptnp in if  
which so defends it, that the Action os the Air cannot dissolve  
it. What I have now said, is sufficient to prove, that there  
is more Advantage in reducing the Calx of Antimony into **a**Regulus, than in attempting the Reunion of the Reguline Parts  
in crude Antimony.

The Processos *Kuncltelis* not more advantageous thari that'  
of Mr: *Stahl.* He takes a Pound of the Calx os Antimony;  
which he reduces into a Paste with Suet; or any other Far;  
and Charcoal. He puts the Whole into a Crucible flightly  
covered, till nothing rises in Smoke ; aster which he gradually  
puts into it a Pound of Nitre; by 'this means we have seven  
Ounces three or sour Grains os a very beautiful Reo-uluS ; but,  
I draw a great deal more from it by the Soapr *Kscnckel* Joins  
to the Fats, winch already form os themselves a flight Coal  
and Soot, another grosser Charcoal,, which obliges him to add  
Nitre to it, in order to destroy these Two different Charcoals  
hy Fulminationi This Nitre melts,, alcalines, and hecomesr  
fluid.\* The Grains of the Regulus, already reduced by the’  
oily Principle, easily precipitate through that Salt when in Fu-  
sion, which they could not have done through the Scoriae;  
which would have remained in an almost solissMass, without,  
the Addition of the Nitre ; for every one knows, that the

wltole Art of Reduction Consists in reuniting into weighty  
Molecules the too much divided Particles of the Metals, and  
in keeping these weighty Molecules in a liquid Medium, thro\*  
which they are capable of passing.

But the Nitre, becoming alcaline, has not, in fulminating,  
carried off all the sat Part of the Mixture; it becomes there-  
fore *Livcr,* with whet remains of the Sulphur ; and under this  
new Form, it converts into *Kermes* the smallest Parts of the  
ReguluS, which it corrodes. If this same Salt preVaiis over the  
Sulphurs, it reduces another Portion of the Regulus into a *Dia-  
phoretic.* Thus two Substractions must be made from the  
Quantity of Regulus, winch should have been collected at the  
Bottom of the Crucible, without taking into the Account  
what rises in Smoke during the Operation, which is fufficientiy  
long, and during the Detonation.

We have formerly seen how much Calx, without Sulphur,  
twelve Ounces of the different Antimonies I calcined, yielded:  
'Tis therefore unnecessary to repeat in this Place, what was said  
on that Occasion. I reduce this Calx with the Soap in the fol-  
lowing manner:

I take two Ounces of every one of those Calxes,. of which  
I form a somewhat liquid Paste, with an Ounce and an half  
or two Ounces os black Soap. I put this Mixture by littie and  
littie into a Crucible, which I make moderately red-hot in the  
Middle of burning Coals, in order to burn the Soap flowly, to  
give the Oils a greater Propensity to imbibe every Part os the  
Calx of the Antimony, and to avoid the Loss *of the* Reguline  
Particles, which, being then very much divided, would rise so  
much the sooner into Smoke, if the Fire should happen to be  
too hot at first.

When the whole Mixture is put, by littie and little, into the  
Crucible, and when I perceive, that the Fat *of the* Soap is burnt,  
I cover the Crucible.. Then I apply a very hot Fire, in order  
to put the whole Mixture in Fusion. It is, at first, heard to  
ferment or boil considerably; but at last that Noise ceases:  
Then I allow the Crucible to become cool in the Middle of the  
Coals; and find, upon taking off its Cover, congeal’d Scoriae,  
with Circles of different Colours. The Middle os these Scoriae  
is sometimes rough, having Cavities, in which we may discover  
white and saline Vegetations.

. Then I break the Crucible, and find a Lump of Regulus  
well collected ; which is not indeed, as yet, pure, but which  
must be purified, aS I shall afterwards direct ; and which, inter-  
nally, appears to be an Assemblage or Collection of small shine-  
ing Grains, as yet not fufficientiy reunited, nor placed in a suf-  
ficiently compact Arrangement, for forming *Laminae,* or littie  
Surfaces.

Two Ounces Of the Calx Of the Antimony of*Auvergne,* of  
the new Company, yielded ms, in three repeated Fusions,  
always the same Weight: .An Ounce five Drams and some  
Grains of the imperfect ReguluS, I have just now mention'd.

Two Ounces of the Calx of the old Antimony of *Auvergne,*which Phad lying by me useless since 17 I 2. when melted also  
with two Ounces of black Soap, yielded only an Ounce and  
four Drams of Regulus.

Other Antimonies of the same Mine, bought at different  
Shops, yielded me an Ounce and five Drams, all but twelve  
Grains;. but it was less pure than the former.

Lastly, the Calx of the *Hungarian* Antimony yielded an  
Ounce four Drams and forty-eight Grains of a purer Regulus  
than that I just now mentioned, having, on its Surface, Fur-  
rows in the Form of Fern ; and, internally, some littie Surfaces  
already well formed.

When I put these Lumps of Regulus, as well cleaned of the  
adherent Scoriae as they possibly could be, into a *China* Bowl full  
Of pure Water, I observed a very strong Ebullition, which, in  
some of the Lumps, lasted for twenty-four Hours : Being sur-  
prised at this, I discovered, with a magnifying Glass, that there  
were in the ReguluS littie Holes, imperceptible to the naked  
Eye. *I* endeavoured to find out what might be the Couse of  
this strong Ebullition, and at last found, that it was a Portinn  
of the Quick-lime, precipitated by its Weight with the Regu-  
line Parts, winch occasioned this Ebullition; because it had  
been calcined afresh with the ReguluS, in a State of Fusion, at  
the Bottom os the Crucible. If it should be asked, whence  
this Earth, of the Nature os a Calx, proceeds; I answer, 'Tis  
from the Soap; for the aofid Lixivium, with which it is made,  
is composed, as I have said, of alcaline Salts and Quick-lime.

. The above Reductions, being made in larger Quantities,  
yielded Products, in proportion, differing very little; so that I  
Can fay, that one Pound of *Hungarian* Antimony, reduced, by  
Calcination, to twelve Ounces three Drams and twenty-four  
Grains os Calx, furnished me with nine Ounces six Drams and  
fifty-four Grains of Regains, which Quantity is not much short  
of ten Ounces; that the Fire carried off from that Mineral,  
when crude, during Calcination, throe Ounces four Drams and  
forty-eight Grains of inflammable Sulphur; that the twelve  
Ounces three Drams and twenty-four Grains of Calx Ought to  
be looked upon as a ReguluS, mixed with a Portion of Earth ;  
and that, without this superfluous Earth, all the Calx would be

converted into a ReguluS, with a’little oily or inflammable  
Principle. This Supposition, however, cannot amount to a  
Certainty, except we could be sure of the Quantity os the Re-  
gulus evaporated during the Fusion, which to mo appears irn pos-  
sible ; but it is os no great Importance, whether what is want-  
ing of . the Weight of the reduced ReguluS, compared with the  
Weight of the Calx of the Antimony, was an Earth reduced  
to Scoriae by the Salts of the Soap, or was evaporated: It will,  
however, follow, from my Experiments, that by the Method  
Of calcining Antimony into a Calx, and reducing this Calx into  
a Regulus by Soap, I extract more Regulus than by the Methods  
of *Stahl* and *Eunckel.*

I now come to consider how this ReguluS may he purified  
without Loss: For this Purpose I use a Method, which, I  
helieve, is entirely new; at least, I know of no Author who  
has made mention of it. I take the ReguluS, well clean'd of  
the Scoriae: I reduce it to a Powder, and min it with half ite  
Weight of the Calx of Antimony, as well purified from the  
Sulphur as that of which I made that ReguluS. I fuse them  
together, in a cover'd Crucible, till the Scorias, which ought to  
float above the ReguluS, are in a smooth and even Flux. The  
Result of this is, that a Lump of Regulus, weighing, when  
impure, one Ounce five Drams and some Grains, and which  
was procured from two Ounces os the Calx of Antimony of the  
new Manufacture, was reduced to one Ounce three Drams and  
sixty-two Grains of pure Regulus; that is, with .a ofLoss. The  
' Calx reduced to Scoriae, and which covered the ReguluS, became  
an opaque Glass, a Sort of *Enamel* of a greyish Colour, lying  
in the fine Furrows of the Surface of the Regulus.

Another Lump of ReguluS, yielded by the Antimony of the  
old Manufacture of *Awvergne,* weighing, when impure, one  
Ounce sour Drams, purified in the same manner, was reduced  
K to one Ounce two Drams and forty-eight Grains ; that is, with  
T of Loss. The Scoriae were reduced to a black Enamel.

The Lump of impure ReguluS, yielded by the Calx of the  
common Antimony of *Auvergne,* bought at different Shops,  
weighing, when impure, one Ounce five DramS, was reduced  
to one Ounce four Drams eighteen Grains; that is, with *crsef,* of  
Loss. The Scorhe were less black than in the former Case.

Lastly, the impure Regulus of *Hungarian* Antimony, which  
weighed one Ounce four Drams and forty-eight Grains, was  
reduced into a pure and starry Regulus, weighing one Ounce  
four Drams and fifteen Grains, in which Case there were thiray-  
three Grains, or of Loss. The Scoriae were a rough Enamel  
of n grey-ash Colour, a littie inclined to the Yellow, and pret-  
ty like the Scoriae of the purified ReguluS Of the Antimony of  
the new Manufacture of *Auvcrgne.*

These Scoriae, which I call Enamel, wore blacken'd by the  
impure Matter, which they carry off from the Regulus during  
the Fusion: When they are opaque, and of a greyish Colour,  
it is a Sign, that they have not found enough of sulphureous  
Matter to convert them into transparent Glass; for 'tis known,  
that a Calx of Antimony, that has been deprived of all its Sul-  
phur, vitrifies very difficultly without some Addition : That, for  
this Purpose, a Fire of the most Violent Heat is requisite ; and  
that 'tis necelsary to add a littie crude Antimony, or common  
Sulphur, if we are inclin’d to have a Glass of Antimony that is  
transparent, and of a fine Colour. I have lately found this  
Observation to hold good upon the Calx of *Hungarian* Anti-  
mony, which I could never transform into Glass without the  
Addition of a littie Portion of Antimony. For this Reason,  
when I purify my first Regulus, I make use of a Cabr of Anti-  
mony, Very well freed from Sulphur ; hecauso I only stand in  
need of a Substance, which, without Vitrifying entirely, might  
become impregnated with the impure Substances which pre-  
vented the Reunion of the Regnline Parts of the fnst Calx,  
reduced by the Assistance of the oily Matter of the Soap.

'Tis true, I may also purify that first granulated Regulus, by  
melting it alone, and without the Addition of the Cahe j but  
its Surface, in that Case, is never clean; it is always sullied by  
heoriae, which adhere Very strongly Io it, and no Stars are form'd  
in it. Besides, it must he a long time kept in a very liquid  
Flux, that the drosty Matter, which hindered the Reunion of  
the truly Reguline Parts, may have sufficient time to gain cheSurface, in Consequence of their Lightness: Now the lonoer  
it is kept in Fusion, the more it loses; so that this is nGt chemost expeditious Way of purifying it.

- But the Addition of the Calx makes a Difficulty arise. I  
shall, undoubtedly, be told, that whet blacken’d theso Scorike  
can he nothing but the fuliginous Matter- of the Oil contained  
in the Soap; or that Oil reduced to a Coal, which before stain'd  
the internal Part of the Lump os my first ReguluS, and hin-  
der'd the Reunion of the Reguline Parts, aS I said above;  
that as I myself admit the Presence of an actual Matter, which  
really contains an inflammable Principle, it necessarily follows,  
that a Portion of the Calx, which I only take to be productive  
of Scoriae, ought to be reduced to a ReguluS by that inflamma-  
ble Principle ; and augment, so much the more, the Weight of  
the Regulus, which I put a second time in Fusion with thin  
Calx; and that thus, tho' I there find a Diminution of some

Grains, yet nothing is thereby proved, because the Diminution  
would have heen greater, if I had not added to it a Calx, a Por-  
tion of winch might be reduced into a ReguluS. I have not  
sunk any Part of the Force of this Objection, winch has been,  
and may still he made.

I shall answer it, by giving an Account of two or three Ex-  
periments. in the room os Calx of Antimony I substituted.  
sactitious Crystal, reduced to Powder; and, in another Eflay,  
alcaline Salt. In the first Essay made with the Crystal, the  
impure Regulus, which weighed two Ounces two Drams and'  
thirty-six Grains, was reduced to two Ounces two Drams and  
fix Grains, that is, with thirty Grains of Loss. In the second  
Essay, made by Salt of Tartar, the same Weight of impure  
Regulus was reduced to two Ounces one Dram and sixty-six  
Grains ; that is, with forty-two Grains of Loss. Is I perform  
the same Operation by mixing the Calx of Antimony with the  
Regulus, in the same Proportion, in order to purify it, I have  
forty-nine Grains of Loss; that is, the fame Weight of Regu-  
lus, consisting of two Ounces two Drams and thirty-six Grains,  
is reduced, pure, to; two Ounces one Dram and fifty-nine  
Grains. Thus, if with the alcaline Salts, which always corrode  
some of the Reguline Particles, I had only forty-nine Grains of  
Loss; if, with the Calx of Antimony, I lost fifty-nine, this is  
a Proof, that the Calx only acts in this Purification like a Flux-  
powder, which reduces the Impurities of the first Regulus into  
, Scoriae; and that it does not supply it with any Addition of

Reguline Parts. .

Is, nevertheless, any one should obstinately deny it to be  
productive of Scoriae only, thisDenial could not possibly destroy the  
Usefuiness of the Operation ; and the End I aim at, is to draw  
from Antimony the greatest Quantity of Regulus possible. I  
have shewn, that, in order to obtain this End, it must be  
reduced to a Calx. It is a Matter of no Moment after what  
. manner I regulised this Calx: If a Part of that which I put upon  
the Regulus, to purify it,, is converted into a Regulus, the Affair  
ι is so far completed ; the Remainder is reduced to Scoriae, which

I easily melt into a Regulus with the black Soap.

Whatever Precautions the Chymist takes; there as always a  
’considerable Loss of the Reguline Portion of the Antimony.:  
That Mineral, whose Volatile Nature is demonstrated by so  
many Experiments, ought to be fused with Care and Attention,  
if we design to lose little of it. . If, in my Essays, I had made  
the Reduction of my Calx into a Regulus, and the Purification  
of that Regulus, with one and rhe fame Fire, I should have  
lost much more of it. I therefore perform the Operations by  
two different Fires ; and aS soon as I perceive, by the Fluidity  
of the Scoriae, that the Reduction is about to be made, I take  
the Crucible from the Middle of the Coals, that the Fumes of  
theRegulus may.cease. . 2. . . ’

. Besides, I have.observed, that by holding it for some time in  
the Fine, aster the Calx is reduced to Scoriae, this Enamel cor-  
roded the Sides os the Crucible, so as to pierce them.

I shall put an End: to this Part os the Memoir by repeating  
whet I said above; which is, that the best Means I have hither-  
to known, of extracting the greatest possible Quantity of Regu-  
lus from Antimony, is to calcine it till its Calx, when put upon  
. live Coals, affords no longer any sulphureous Smell; to reduce  
this-Calx into a ReguluS, by uniting it with a Reductive, which  
may, at once, furnish a sat Mattes, and yield liquid Scoriae, such  
as black Soap ; - and to purify that Regulus with the same Calx of  
Antimony. By this Method I extract two Ounces of Regulus  
from each Pound of Antimony, more than *Kunciel* and the late  
Mr. *Stahl* have extracted by their Processes : And I shew, at  
the same time, that there is not, in this Mineral, such a large  
Quantity. of inflammable Sulphur as is generally thought, and as  
I myself believed there was, when I publickly read my former  
Memoirs upon the *Kermes* ; since, in calcining it with Atten-  
tion, no more than three Ounces and five Drams, at most, are  
burnt or evaporated. If the Mineral, os which I am speaking,  
was more fixed when’fubjected to the Fine than it really is, I  
should have come nearer to the Exactness of Proportions ; but  
as the greatest Chymists have not been able to check its Volati-  
lity, I hope Impossibilities will not be required at my Handy.

I now proceed, to some other Observations, which, to me  
appear independent of the Operation, and which I have reserv'd  
for the End of this Memoin, that I might not interrupt the Or-  
der I proposed to myself

I have shewn, that by reducing the . Calx of Antimony by  
black Soap, I obtain'd a Regulus, winch I called *impure,,*because it was not compact. If a Quantity of this Regulus, of a  
moderate Size, is look’d into, it is found full of Cavities ; and  
in the largest, by the Assistance of a magnifying Glass, we per-  
ceive Laminae of. Regulus, full farm'd, winch the Air, shut up  
and rarefied in these Cavities, has hinder’d from embracing each  
other: Some of these *Lamina* are triangular, but the greatest  
Number of them are- *hexa gemes.* Lastly, some of them , are  
considerably long, which, joining themselves in right Angles by  
one of their Sides, form a kind of small. Canals; some Needles  
are also observed in them, hut very sew. AS to . the external  
Surfaces of these Quantities of ΚρσιιΙιις. wp nhssrve nnrhinut

remarkable in them, except some Furrows diverging,, as it  
were, from a common Centre, and forming a Species of Rayst  
The unpurify'd Part of these Masses of Regulus, which appears  
the most compact, are possibly no more than tho fame *Lamina*sasten'd to each other, and which discover themselves hy their  
sharp Edges, and by the Summits of their Angles. Whether  
these Laminae are the original and constituent Particles winch  
ought to compose the Regulus, or whether they are only the  
Result of an accidental Arrangement of Particles, previously  
smaller, are Points which I will not take upon me to determine.

In Regulifing the Calx os Antimony by black Soap, I have  
twice or thrice had saline Vegetations, in the Form of small  
Trees, raised considerably above the Sursace of the *Scordae:*These were undoubtedly occasioned by the sudden Refrigeration  
of the Matter in Fusion. I shew'd one of these Vegetations to  
the Acedemy, that they might be sure, that it corresponded ex-  
actly to the Representation given of it. But I cannot lay down  
certain Rules for producing such Vegetations at Pleasure ; for  
whatever Pains I could take, I could not afterwards succeed in  
procuring others.

All these Reductions of the Calx of.Antimony into Regulus  
are not made without the Rising os a sensible Quantity of silver  
Flowers, which are ordinarily called the Flowers of Regulus i  
These are long, flender, and rigid Filaments, as pungent as  
Very fine Needles. Is they’ are viewed thro’ a Microscope with  
a single *Lens,* but furnished with its *Corrector,* they appear  
opaque; but when the Corrector is removed, and they are exposed  
to the clearest Light possible, they appear to be diaphanous Fila-  
mente of Glass : Yet this Observation does not absolutely prove,  
that they are really Glass ; since most Objects, Viewed thro' *ak*fine *Lent,* appear transparent; provided they are considerably  
small. *Nnvton* has observed, that by placing a Very small  
opaque Body before the Hole thro' which the Light enters into  
a darken’d Chamber, that same Body appears to be transparent.  
The Microscope, in this Case, produces almost the same Effect  
with the darken'd Chamber; so that what I take to he Glass,  
inay only to me appear so thro’ an Error of Vision:

I also succeeded in reducing the Glass of Antimony by Soap,  
by treating it in the same manner with the Calk; but aS this might  
he expected, I wave giving any farther Account os in I imagin'd  
I might have, in like manner, succeeded with the *Diaphoretic,*excepting some small Difference which would have regarded the  
Weight : But the *Diaphoretic Antimony,* prepared in the com-  
mon Way, being mixed with black Soap, and then forced by  
the Fife, like the Calx os that Mineral, was converted into a  
Mass, which I allowed to cool, hoping to find a ReguluS at the  
Bottom of the Crucible when I should break it. Haying exa-  
mined it when almost cold, in a Place exposed to the open Air;  
I perceived, that the Mass became hot in proportion as it  
absorbed the Humidity os the Air. - I applied some Pieces of it  
to the Flame of a wax Candle, upon which they kindled and  
crackled: Upon throwing back some of these kindled Pieces  
into the Crucible, they kindled the rest of the Mass, which also  
burnt and crackled.

I repeated this Operation, and made use *of a.* Very beautiful  
*Diaphoretic Mineral,* which I had prepared, some .Days before,  
of two Parts of Regulus and three Parts of Nitre. I mixed an  
Ounce of it with two Ounces of black Soap r This Mixture,  
when put by little and little into the hot Crucible, kindled and  
was very much puffed up. When the Flame was over; the Mass  
subsided; and assumed a reddish Colour,, like that of a live Coal;  
whilst luminous Vapours; *of a* bluish Green, arose from it.  
All these Circumstances happen'd, without Variation; upon  
every Projection of the Matter. When all the Mixture was  
projected, and ceased to send up Flames, and luminous Vapours,  
there was a Sort of reversed Mushroom form'd, which was hoi-  
low, .porous, and black. I crush'd .the Edges of it, and added  
a fresh Ounce of black Soap, tltat I might the hetter cover the  
Matter I intended to reduce. When this last Soap was burned;  
and I perceived a small bluish Flame on the Surface of the’  
Mass, I covered the Crucible with its Lid, and a great deal of  
Charcoal ; after winch I produced a strong Heat, by about ati  
hundred Puffs of the Bellows: But notwithstanding the Vio-  
lence of the Fire, winch was both stronger, and longer con-  
tinned, than in all the Operations I have hitherto mentioned,  
there were no fluid Scoriae form’d, and the Mass remain’d spon-ι  
gious. I allowed the Fire to go out, and carried the Crucible  
to a Corner of my. Laboratory, where it remained for five Hours  
without being touched. Towards Night I was inclined to exa\*  
mine this Matter: Accordingly the Person who held the Cruci-  
ble, winch was quite .cold, not guarding against . an Effect,  
which indeed could hot be foreseen, uncovered the Top .of the  
Mass with a Piece of Iron ; but as soon as the Air had Access  
to it, it took Fine, and there was a sudden Explosion made,  
withaNoise, which threw a Very considerable Quantity os Fine  
upon his CloathS, and burnt several Holes in them: There was  
a. strongSmell of Sulphur diffused, resembling that of those Phojo  
phori in Powder, os which the late Mr: *Lemcry* the Younger  
has given several Descriptions in his Memoir of I7I4i bee  
**ALUMEN.**

I did not obtain the Reduction of the Diapheretio I wanted,  
but Chance afforded mo a very singular Phosphorus, which Ϊ  
did not seek after. I repeated the same Experiment since, with  
the fame SuccefS, whether I used the common *Diaphoretic,* or  
my own *Diaphoretic of Regulus ..* ’Tis true, the letter succeeded  
better than the former, provided neither too strong nor too  
weak a Fire was applied, after the Addition of the last Ounce  
of Soap.

When, in order to make my *Diaphoretic,* I detonato the  
Regulus with -pure Nitre, I wash it generally, in order to sepa-  
rate from it the Nitre alcalixed during the Deflagration. Its  
Lixivium, v:thich is of a very caustic Nature, assumes a bluish  
Colour ; which probably proceeds from a Portion of the inflam-  
mable Principle, which that Salt has carried off from the Regu-  
lus : And as a Proof of this, that Lixivium blackens Tin and  
Silver, which it would not do, is it was not sulphureous. If  
instead of throwing this Matter into Water, after the Detona-  
tion, I throw it into Spirit of Wine, it assumes, almost imme-  
diately, a beautiful red Colour,' which, by Digestion, is still  
heighten’d more and more. This Liquor, which *Stahl* has  
called *Tinctura Alcalica acres,* is a Tinolure of Antimony, not!  
of an emetic Quality, but only simply alcaline and diaphoretic,  
-which, by means of the Nitre, has carried off from the Anti-  
mony a Portion of its Metallic Sulphur j if, by the way, a  
Metallic Sulphur has an Existence in Nature , from whence it  
follows, that a well prepared *Lilium* is not simply a Tinfture  
of alcaline Salts, as some People imagine. It is true, that  
Spirit of Wine, digested upon a simple fixed Salt, well alcaliz’d,  
assumes at last a reddish Colour; but that fame alcaline Salt,  
when it is pure and unmixed, will never give a bluish Colour  
to Water, as Nitre alcalized with Regulus does.

This Digression is not so unseasonable as at first Sight it may  
possibly appear to be ; for it sen es to prove, that there is a con-  
siderable Quantity of an inflammable Principle in the Regulus.  
Besides ’tis well enough known, that by converting the Regu-  
lus into a *Diaphoretic,* its Weight is considerably increased.  
Eight Ounces of Regulus, for Instance, yielded me eleven  
Ounces and two Drams of *Diaphoretic,* even when well edul-  
corated, and sufficiently dried. This Augmentation can pro-  
ceed from Doming elfe than the Concentration of the Acid of  
the Nitre in the Parts of the Regulus: Now, upon this Suppo-  
sition, I can discover the Cause of the Deflagration of my  
Phosphorus...

I account for it in this manner: There is a great Quantity of  
the Parts of the Calx, which was formerly Quick-lime, in thet  
gross and unsiltrated Lixivium, of which the biack Soap is made:  
When I calcine the Mixture, of which my Phosphorus is made,  
1 burn some Part of the inflammable Matter *of* the Soap, and  
the remaining Part is reduced to a Coal. During the Action of  
the Fire, the Acid of the Nitre, by little and little, quits the  
Reguline Parts which retained it, in order to uhite itself to the  
alcaline Salt of the Soap, with which it is formed into a rege-  
nerated Nitre: But all the alcaline Salt is not employ’d in this  
Regeneration ; hecaufe there is not, in ell Probability, enough  
of the nitrous Acid. By the fame Fine the earthy Particles of  
the Calx, scattered up and down in the Soap, are calcined  
afresh, and once more become a *Calx Viva.* As all these Parti-  
cles of different Natures are contiguous to each other in the  
Crucible, they will, by their Actions, contribute to produce  
the Effeol we speak of, as soon as an external Caule shall con-  
cur to its actinal Production. Taking this for granted, I raise  
the Crust which covers the Mass of Phosphorus, upon which the  
Moisture of the Air, or those aqueous Particles with which it is  
impregnated, and which din greedily absorbed by the alcaline  
Salts.contained in the Mixture, are introduced. Upon this the  
Calx hecomes moist, grows warm, kindles, and lays held of  
the Parts of the Charcoal, and regenerated Nitre, which are  
contiguous to it ; and hence follows the Detonation of the whole  
. Mass. That Nitre is actually contained in this Mixture, whe-  
ther by Regeneration, which I believe to be the Cafe, or by  
fome other Means, is proved from this Circumstance, thet  
upon trying the fame Experiment three times, with *Powder of  
Algaroth,* it did not succeed ., because, in that Powder, the An-  
timonial Parts are not united to the nitrous Acid, but to the  
Acid of the Sea-falt.

If amis is not looked upon as a sufficient Proof, I shall here  
subjoin an additional one. When, with an Intention to reduce  
the *Diaphoretic* into a *Regulus,* I contioued to augment the  
Fine, there happened a Detonation of thet Nitre, which was  
fused with the Coal of the Oll of the Soap, like that which  
would have been produced by a Mixture of Nitre and common  
.Charcoal: The *Diaphoretic,* in the mean time, was dissipated  
in white Vapours , and there ouly remained in the Crucible a  
biack hard Crust, which adher’d to its Sides, without any  
. Marks of Detonation. For this Reason, the Success of my  
fulminating Phofphorus depends upon the Degree of Calcina-  
tion which I give to the Mixture; for this Reason we must info  
take care, not to cany the Fine to such a Height as to find  
the Nitre.

As to the. Probability of the Concurrence of a *Matter,*

which is become a Cafe *Viva,* and which kindles and burns, I  
shall relate the following Fact: About five Years ago, upon the  
breaking of the Ice on the River *Seine,* a Boat full of Lime was  
staved by the Ice; upon which the Water, getting Access to the  
Laine, kindled it. The Lime burnt the Boat, and the Fire  
was convey’d from thet to the Boats thet were next it, so thet  
a considerable Fire eofued, and my Situation at that time gave  
me an Opportunity of being satisfied, as to the Truth of its  
Origin.

We heve several Chemical Mixtures, which take Fire as  
soon as they are exposed to the Air ; such as sulphureous, vege-  
table, and animal Substances, calcined with Alum.

The Mixture of Regulus of Antimony, and corrosive Subli-  
mate, sometimes takes Fire.

Mr. *Stahrs* Antimonial Crocus of Mars took Fine in the  
King’s Garden, where Mr. *Boulduc* exposed it to the Sun, in  
order to dry it with the greater Expedition.

*Aurum Fulminans* fulminates by the Heat produced by a some-  
what rapid Trituration.

The Red of Iron, ofed in stirring the several Mixtures in the  
Reductions of my Calces of Antimony, being scraped with a  
Knife, yielded Sparkles of Fisc. .

Mr. *Keaurnur* observed, that from an almost equal Mixture  
of Antimony and Iron, a Metallic Mass is produced, which,  
when filed down pretty strongly, yielded a great many Sparkles  
of Fire capable of kindling any combustible Substance.

Thus it seems, in order to prepare Phosphorus, nothing more  
is required than to concentrate a Matter, capable of taking Fire,  
in certain *Cellula,* where it may remain calm and dormant, till,  
by some Cause or other, the Sides of thefe *Cellulae* are broken,  
and Access given to a more subtile Matter, capable of commu-  
nicating an extremely rapid Motion to it. Whether this Theo-  
ry sufficiently accounts for the Inflammability of Phofphori, or  
whether more ingenions Hypotheses are invented for that Pur-  
pose ; yet still it must be owned, that Speculations of this Na-  
ture are more curious than useful. *Jldemoires de f Academic  
Rayale, A. syasc.*

*Of the* **REGULUs** Αντιμονιι **MEDicINALIs,** *senm*Hoffman.

The Regulus of Antimony has not been exempted from the  
Fate of other chymical Medicines; for upon its appearing fome  
Yeats ago, it was at first looked upon as an *Arcanum,* or Secret  
of the last Importance, especially in *she Netherlands.* Who its  
Inventor might heve heen, is a Point as yet not fully agreed  
upon; for some afcrihe the Discovery to *Cranius,* and others to.  
*Mcetseus,* who has inserted the Preparation of this *Regulus* in his  
*Chymia Rationalis;* It is also to he met with in the *Mod. Chyrn.*of *Vigani.* As Mankind are not agreed, with regard to the  
Inventor of this Medicine, so they also run into opposite Senti-  
ments, with regard to its Qualities and Effects; for there at  
first were, and still are, a great many who rank it among the  
principal and most important Secrets of Physic ; whereas others  
assert, that it is of no Use at all, or, which is worse, afcrihe a  
noxious and poisonous Quality to is.

For these Reasons, I thought it would he no unuseful Task,  
briefly to inquire into the Nature of this Medicine, that we  
may be the better able to judge, which of these two Classes of  
Men, who run into fo opposite Extremes, are in the Right,  
and which in the Wrong; and as no profess’d Attempt of this  
Kind has heen made before, I hope I shall the more readily  
meet with a favourable Indulgence, rf I handle the Subjmi with  
less Accuracy tlian its Importance deserves. Now, that I may  
execute my Design with the greater Perspicuity, I shall first  
briefly touch upon the Principles of which this Regulus is made  
up; secondly, I shall give its Preparation; and, lastly, its  
various Uses.

The constituent Principles, then, of this *Regulus,* are, first,  
Antimony itself, which is indeed the principal, since it consti-  
tutes the very Matter of the *Regulus.* Secondly, common Salt,  
whofe Acid is very fine, and of a highly volatile Nature.-  
Thirdly, and lastly, an alcaline Salt, which produces very sin-  
gular and remarkable Effects upon sulphureous Substances,  
especially of a Mineral Nature ; as also upon the sulphureous  
or oily Parts of animal and vegetable Substances.

*Of the Preparation of the* **MEDICINAL REGULUS, ain :**

Having thus enumerated the feveraI Principles of which the  
*Regulus* is composed, it now remains, that we take a View of  
the Method of preparing it. But the’ several Authors, and  
among the rest *Maestus,* in his *Cbynda Rationalis, et Act.  
Curieij. Least. Koenig* in his *Regnum Minerale, Barkhyifen* in  
his *Pyrofophia,* have laid down Directions with regard to this  
Particular ; yet I think myself obliged, in like manner, to give  
an Account of It.

Take then five Parts of pure Antimony, four Parts of com-  
mon Salt, and one Part of Sale of Tartar. Some, indeed,  
alter the Proportions of the Ingredients, and take eight  
Parts of Antimony, seven of common Salt, and one. of

Salt osTartar; out the former Proportions are most gene-  
rally adher'd to. These Ingredients, when beat and mix'd  
together, are to be successively put into a red-het Cruci-  
ble : Let the Action os the Fire be raised to such a Height,  
that the Matter may be sufficiently and throughly fused ;  
that is, let the Fire applied be a *moderate sensory one.* Then  
after the Matter is sufficiently fused, which generally hap-  
pens in a Quarter of an Hous, if right Measures are taken,  
let it be pour'd into a Vestel of a conical Form, hesmearfd  
with Tallow,- or smoaked with a Candle : This Vessel is  
to he shaken in the manner observed in other Fusions of  
*Regulus,* that by this means the *Pagulus* may he sufficient-  
ly separated from the Scoriae, and carried to the Bottom of  
. the V essel : Some reckon this Circumstance of shaking so  
much the more necessary, because aS this *Regulus* is lighter  
than any others prepared from Antimony, it must of Con- .  
sequence be separated from the Scoriae, and fall to the Bot-  
tom with more Difficulty. Thus, if such a Concussion, or  
Shaking, should be neglected, and the Min tine pour'd  
when boiling, as it were, from the red-hot Crucible into  
a cold conical Vessel, it frequently happens, that during  
the Continuation of the ebullition, a Portion of the 5co-  
*rice* is intermixed with the *Regulus*; and, *vice versa,* a  
Portion of the *Regulus* remains in the *Scoria*; so that, by  
this Oversight, wesdo ;.ot obtain it so pure and unconta-  
minated, or at least so beautiful and shining, as it would  
Otherwise be. The *Peg ulus,* when separated from the r  
*Scoria,* resembles polished Steel or Iron ; but if either in  
a Mortar, or upon a Marble, with or without the Addition  
of Water, it is reduced to a Powder so fine, that the shine-  
irrg Particles entirely disappear, it assumes a reddish, or  
rather a purple Colour.

But since there is no great Difficulty in the Whole of the  
Process, I shall not, at present, spend more Time in enume-  
rating or describing any more of its Steps : But 'tis to bo ob-  
served, with regard to the Addition of the alcaline Salt, that  
some who maintain, that there is a vast Difference betwixt Al-  
calis, adhere so inviolably to Salt of Tartar, either for the sake ’  
of its superior Purity, or on account of its nobler effects, or  
occult Qualities, that they will not allow any other Salt to he  
substituted in its room. I have some Reason to think, that  
the Observation of *Vigant* may have laid a Foundation for the  
Doubts of People, with regard to this Matter; since, in *Med.  
Chym. p.* 20. he brings an Experiment - for establishing the  
Difference of Alcalis ; and affirms, that he himself, by prepar-  
ing *Antimony* with common Salt and Salt osTartar, Obtained a  
reddish *Ragulus*; whereas by a like Fusion of *Antimony* with  
Salt of *Carduus Benedictus,* instead of Salt osTartar, a simple  
*Regulus* was only yielded. But I must own, that tho' I have  
with this Very View made several Experiments, and that with  
a great deal of Caution, yet I could never observe so consider-  
able a Difference hetween the *Raguluses* produced, but ob-  
tained the fame, with Salt of Carduus Benedictus, and other  
Alcalis, as that procur'd in the common way by means of Salt  
of Tartar. I therefore suspect, that this simple *Ragulus* of  
Vigani was produced by a fortuitous Intermixture of Char-  
coal, and some other sulphureous Concretion. As I have  
not therefore been able either *a priori,* or *a posteriori,* to dis-  
cover the Difference of alcaline Salts, so I think we have no  
Occasion to be over-scrupulous in our Choice, provided we only  
make use of an Alcali that is pure, duly prepared, and not  
adulterated by any adventitious or heterogeneous Substance.

It is still more superfluous to hesitate about our Choice of  
.common Sals, or make nice Disquisitions, whether Sea-salt,  
Sal Gemmae, Or Fountain-salt, are most proper for this Pur-  
pose, since the End seems to be equally .well obtain'd by all of  
them. . . - -

Tins then is the most common and usual Method of prepare-  
ing the *Medicinal Regulus* ; but it is not always adher'd to by  
some, who either add or omit Ingredients, or alter the Propor-  
tions of the Weights, just as Caprice, or some particular View,  
directs them. Thus some omit the alcaline Sals, and substitute  
in its Place crude Tartar, but in a larger Quantity. They  
therefore take eight Parts of *Antimony,* seven Parts of *common  
Salt,* and fix Tarts of *Tartar.* This Mixture is put into a red-  
het Crucible for Fusion, which indeed is more difficultly brought  
about, than in preparing the common *Medicinal Regulus.* By  
this Method a *Regulus* resembling the *medicinal* one is yielded,  
and I take it to be of the same Species, tho' it is not fo heauti-  
sul, being of a darker Colour, and of a more porous Contex-  
ture : But when reduced to a Powder, it assumes a purple Co-  
lour, just as the *Medicinal Regulus* does. Its Scoriae are light,  
porous, and resemble the Flakes which sty from hot Iron when  
hammer’d. Others, who in the Production Of *Regulus* per-  
haps ascrihe too much to common Salt, order the Salt of Tar-  
tar to he entirely omitted, and the common Salt to he aug-  
mented by the Addition of a Quantity equal to the omitted Salt  
’ of Tartar. This is ordered by *Barkiais.en in Pyrosophia, Libro* 3.  
*Sectione* 3. *Capite* 2. where he maintains, that the same *Medi-*

*cinal Regulus* may he Obtained from *Antimony* slightly fus'd  
with an equal Portion of common Salt; but upon Trial,  
the Effect promis'd is so sar from heing produced, that there  
is not so much aS a perceptible Change induc'd upon the  
*Antimony,* by means of the common Salt. Lastly, among the  
several Methods of preparing *Reguluses* of this Kind, we may  
reckon that, in which, for correcting the Crocus Metallorum  
of *Rulandus,* Chymists add common Salt, and thence promise a  
like *Medicinal Regulus* aS to its Effects. For this Purpose,  
they therefore order three Parts of Antimony, two Parts of  
Nitre, and one Part of common Salt : See *Le Mort in Actis  
Curiosis Leidens.* Others reject this Proportion, and prefer  
equal Quantities of each Ingredient. Now these Ingredients,  
when beat and mixed together, are to be put into a red-hot  
Crucible, and reduc’d to a due Degree of Fusion, which is soon  
obtain'd. After this, the Matter is to be pour'd into a coni-  
cal Vessel, or as *Le Mort* intimates, in the above-cited Passage,  
it may he left in the Crucible, from which, when cold, it is to  
be taken. The ReguluS yielded by this Process, is not unlike  
the Crocus of *Rulandus ’,* it is, like the *Medicinal Regulus,* of  
a porous Consistence, not very smooth, but clean and beauti-  
ful When reduced to Powder, it acquires a dark-reddish Co-  
lour like that of red Bole. Its Scorhe are light, of a yellowish-  
amber Colour, and not unlike those obtain'd by the Depuration  
*of Raegulus os Antimony* with Nitre.

*Of the Use of this* **REGULUS.**

The Medicinal Regulus may be applsid, first, to achymico- '  
physical, secondly, to a pharmaceutic, and, thirdly, to a me\*  
dico-therapeutic Use, upon each of which I shall briefly touch.

Its Use then in Chymistry may he plainly perceived, from an  
^Etiological Research into its Nature, and the Manner of its  
Production ; so that I shall say no more upon this Point, but  
proceed to take a View of its Use in Pharmacy.

And tho' Chymists have not hitherto been solicitous about  
extracting other Medicines from this *Regulus,* yet I shall briefly  
enumerate such Preparations of it aS are in Use. Our learned  
President then, in his Notes to *Potcrius, Cap.* I 2. has proposed  
a Preparation of antimonial Sulphur from the *Medicinal Ragu-  
lus* helled in Lime-water, and which is to be precipitated with  
Spirit of Vitriol. This Sulphur, he says, is of the same Effi-  
cacy and Virtues with the *Panacea* of *Glauber* ; he also prefers '  
it to the *Regulus* itself, because, as he says, in it the arsenical  
Virulence, heing corrected by the Spirit of Vitriol, is weaker.  
than in'the *Regulus.* In the same Work he also gives Direc-  
tionS for the Preparation of an *antimonial* Tincture, to be ex-  
tracted from the *Medicinal Regulus,* fus'd with an Alcali, by  
means of Spirit of Wine, either tartariz'd, or drawn off from  
*antimonial* Scoriae. He also teaches us how to prepare an ano-  
dyne Tincture from the *Regulus,* which is done by dissolving  
Opium in a Decoction of the *Medicinal Regulus* with Lime-  
water, and by extracting the Essence from the inspissated Solu-  
tion by means of *Malrnsafowine,* or Spirit of Wine. Concern-  
ing the Virtues of this *Tincture* he speaks thus : " This Medi- -  
" cine is exquisitely calculated for dinsing Pains, and procuring  
" Sleep ; for by the Lixivium of the Quick-lime impregnated  
" with the *antimonial* Sulphur, the narcotic and stupisying Qua-  
" lines of the Opium are corrected, and thus the Symptoms  
" usually brought on by the Use of Opium are prevented,  
ic whilst, in the mean time, the attenuating and anodyne  
" Qualities of the *antimonial* Sulphur, which check the impe-  
" tuous Motions of the Spirits, prove a happy Balance for  
" each other.'' Here we may also take Notice of whet is  
said by *Basil Valentine,* in his *Currus Triumphalis* **ANTIMONII,**concerning an *antimonial* Tincture and Balsam, which are pre-  
pared from a Mixture of Tartar and *Antimony,* in Form of a  
Liver, not unlike the *Medicinal Ragulus.* Besides, an *antima-  
nial* Calx, and a Ceruss of *Antimony, wuJ* be easily prepared  
from the *Medicinal Regulas;* a Glass may also be prepared  
from it, if after washing out the alcaline Portion, it is gently.  
Calcin'd, and the Sulphur by that means carried off, upon which  
the calcarious Remains are easily fus'd into a Glass. Let this  
suffice for the Use of the *Medicinal Raegulus* in Pharmacy. The  
Subject might indeed he much farther protracted ; but as that is  
not necessary, I shall only repeat, that in many Shop Prepa-  
rations the *Medicinal Raegulus* may he us'd, as a proper Succe-  
daneum to *Antimony* itself.

I now come to the third and last thing proposed, which was,  
to inquire into the Use of this *Medicinal Regulus* in the Practice  
of Physic ; and here I cannot help condemning those who with  
exaggerated Encomiums extol tins *Regulus* as an universal and  
divine Panacea; as for my own Share, I can with greater  
Chearfalness go into the Sentiments of those who observe a due  
Medium in this Point. Its Efficacy is highly extoll’d in cbro-  
nical Disorders, and such as arise from long-continued Obstruc-  
tions *of* the Viscera : Hence our learned President, in his Notes  
upon *Potcrius,* commends it in Dropsies, Epilepsies, Scurvies,  
and Fevers; for as these Disorders are os a stubborn and obsti-  
nate Nature, they require Medicines winch do not, like Vege-  
table Substances, too quickly produce these Effects, but remain

for a considerable time in the Body ; and by osten impelling  
the. tenacious Matter, at last entirely break and. subdue it.  
Hence we rtiay easily conceive why this *Regulus* must he a  
Medicine of singular Efficacy in surmounting the Obstinacy  
of.chronidal Disorders. There are also not a few who highly  
extol its Efficacy against Fevers. *''Maetsius,* in his *Chynr.  
Ration, et Actis Curios. Lugde* says, that *it* is a *Specific Dia-  
phoretic in Fevers of all Sorts.* The same Author commends it  
*in dll Disorders where,* to use his own Words, *Sweats are  
wanted, because it dors nor, like vegetable Substances, inflame the  
Blood.* I myself am inform'd by People who were acquainted  
with this Author when alive, that the made daily Use os this  
*Pegulus;* and his own *Praxis Chyrnidtrica* is a concurring  
and additional Proof, that he did so ; for in that "Work he main-  
tains, *That it is os. uncommon Efficacy in all Diseases where the  
Motion of the Lymph, and insensible Transpiration, are to be  
promoted.* Thus he commends it in the Gout, the Apoplexy;  
*etc.* but more particularly in Fevers. ' This he has. also done in  
*Artis Curios. Lugd.* where he orders- it to he used with a dia-  
phoretic Regimen. *Barkhyisen* joins Issue with *Maetsius,* and  
highly extols its sudorific Virtues in Fevers, and cutaneous Dis.  
orders. *Koenig* declares himself of the same Sentiments in- his  
*Regnum Miner ale. Cap.* o. where he also proposes a Form of  
a Medicine consisting of the *Medicinal Regulus* reduced to a  
Bolus, with *Peruvian* Bark, and *Thociaca,* to be taken a few  
Hours before the Paroxysm os the Fever. But notwithstanding  
**the** high Encomiums bestow'd upon this Medicine by-its in-  
ventor, I should not advise any one to use it in violent Quar-  
tan Fevers; because Dropsies, and other Disorders, are very  
often brought on by the U se of Medicines that are so astrin-  
gent, and capable of producing such strong Commotions. This  
Medicine is also commended by some in Cases where the State  
of the Lymph is bad, in Dropsies, Anasarcas, *etc.* as I have  
already observed. But particularly with regard to its Use in an  
Anasarca, I have been satisfied by the learned and judicious  
Mt. *Hinnike,* who mixed it with Mercurius Dulcis, and used  
if under that Form with uncommon Success. Our learned  
President, in his Notes upon *Potorius,* orders it to be pre-  
scribed in small Doses, with the Bezoardic Powders, in the first  
Stages of malignant Fevers, Small-pox, and Dysenteries, *Be-,  
cause,* fays he, *by its Means a gentle Salivation and Diaphoresis  
are brought on, and the Mucus of the Prima Via being attenu-  
ated, the Hiavines.s and Uneasinese of the Pracordia are remcnstds*Lalso rememher, that when malignant Fevers rag'd pretty  
much in my own Country, that excellent Chymist *Rollwagius*often us'd this *Regulus* with the greatest Success; of is, toge-  
ther with some other earthy Absorbents, he composed an alexi-  
pharrnic Powder, which is in constant Use at this very Time.  
This Powder is accurately describ’d by the learned *Apinus,* in  
his *Tractatus de Febribus epi do* where, from his own Ex-  
perienoe, he ascertains the Efficacy of it, but particularly of the  
*Pagulus,* in malignant and epidemical Fevers. I also know, that  
the *Regulus* was used by the above-mentioned Dr. *Hennike* in  
these Disorders ; but in Process of Time he desisted from using  
st so frequently as he had formerly done, on account os some  
Ihconveniencies that arose from its being negligently prepared ;  
and chose the *Bezoardicum Joviale,* or the *Antihecticum Potcrii,*aS a Succedaneum to it. *Maetsius* commends the Lixivium os  
its Scoriae apply'd externally as a proper Medicine for the Itch ;  
and I remember, that, by my Father's Advice, not only I my-  
self, but a great many others, labouring under this Disorder,  
us'd this Medicine with incredible Success. I also remember  
so have seen the *Regulus* itself miixt with earthy Substances used  
in the Itch, and have known it in that Form, and in Conjun-  
ction with a sudorific Regimen, to remove oedematous Swellings,  
especially of the Feet. Hence we may plainly perceive the  
Efficacy os this *Regulus,* in augmenting the Motions of the  
Humours, which, in this Case, were hinder'd from rising to  
their greatest Height, by the Addition of the earthy Astringents.  
Having thus said something concerning the Use os the *Medici-  
nal Regulus* in the Practice of Physic, I shall now subjoin a sew  
Hints relating to the Manner in which it operates.

. Now, aS the *Medicinal Pegulus* produces two Effects, which  
are promoting a Diaphoresis, and removing the Lentor of the  
Humours, so it seems to operate in two different manners, one  
*of* which consists in promoting the several Motions, and the  
other.in correcting the Qualities of the Humours ; hut this lat-  
“ter does not exert Itself so strongly as the former. It acts in  
the former of these manners both in Consequence *of* its *sulphu-  
reous* and its *reguline* Parts.. As for *Sulphur* in general, 'fis suf-  
frciently known, that it not only contains the Very Matter of  
Tine, which is itself easily susceptible of the quickest Motions,  
sand sufficiently capable of augmenting the Motion of the Hu-  
mours ; but also, that from its being a Mixture of a phlogistic  
with a Vitriolic Acid, it possesses a *tonic Force,* as dally Expe-  
rience teaches us, upon observing its Efficacy in repelling **the**Itch. By this *tonic Force* the relaxed Vessels recover their na-  
rural Tone; and by this means the Bloed being not only put  
, into a more violent Motion, but also forc’d tuto\* narrower  
ί Ducts, must of course he more attenuated, and acquire a greater

Degree Of Subtilty. AS to its *Reguline* Part, we are to observe,  
first, that it receives a stimulating Force from am Addition of the  
arsenical Parts, and thus becomes capable of exciting strong and  
briik Motions in the Spirits. Secondly, That by reason of itS  
mercurial Nature it is capable of penetrating and dissolving  
not only the thick and viscid Humours lodg'd in the Primae  
Viae, but also those winch are intermixed with the Mass of  
Blood itself, and retard its progressive and intestine Motion.  
Hence we see in whet manner it may correct the Defects of  
the Lymph, clear the Viscera, when obstructed with Crudities  
of this Kind, promote rhe several Secretions, and render the  
Juices fit for Motion. In these last mentioned Effects, or in  
changing the Qualities of the Fluids, its second Manner of ope-  
rating consists.

It now only remains, that I say something concerning the  
Method of administring this *Medicinal Regulus.* It may then  
he commodioufly enough exhibited in the Form of a Powder,  
since the Dose necessary for any Purpose is neither large nor  
nauseous. Is it should happen to be a little too heavy, it may  
be mixed with the lighter Absorbents, as they are call'd, .pre-  
pared of Mother os Pearl, Crab'S-eyeS, *etc.* Such other Sub-  
stances may also be mixed with it, as the Diversity os Disorders  
shall be judged to require. Thus our learned President orders it  
to be exhibited with gen tie Chalybeats in Dropsies ; in Epilep-  
sies, with cinnabarine Preparations ; sand in intermitting Fevers,  
with digestive Salts, Absorbents, *etc.* I have above taken No-  
tice os its uncommon Efficacy in an Anasarca, when mixed with  
Mercurius Dulcis ; for by its Means, half a Scruple of Mercu-  
rius Dulcis has sometimes proved os more Efficacy, than two  
Scruples would have done without. Some add it to Vomits as  
a Stimulus, and by way of a Digestive. In Form of a Potion  
it may be mixed with other Diaphoretics, Anodynes, *etc.* with  
Diascordium, the Theriaca Coelestis, the Bezoardic Tincture,  
the Tincture os Opium corrected with Salt of Tartar, and with  
the diaphoretic Waters of Germander, Chervil, and Cherries.  
*Maetsius* in his *Chymia Rationalis,* and *Apinus,* in his Treatise  
*de Febribus Epidem.* have given Forrnules os this Kind. It may  
also be exhibited in the Form of Pilis, with resinous and re-  
solvent Gums, and with the aperient bitter Extracts os Worm-  
wood, Carduus Benedictus, Germander, Fumitory, Scurvy-  
grass. Saffron, Gum Ammoniac, Sagapenum, Heders, Myrrh,  
Aloes, *etc.* When the *Ragulus* is prudently and shilfully  
mixed with such Substances, it becomes a sar from despicable  
Medicine in menstrual Disorders, and Infarctions os the Viscera..  
Its Dose is from six Grains to one Scruple, and upwards, as  
the State of the Patient shall require. But before this *Ragalue*is used, it must be so throughly triturated, and, upon a Mar-  
ble, reduced to a Powder so fine, that none os the shining  
Sparkles may in the least appear r For this Reduction of it to  
so fine a Powder is absolutely requisite, both to itS easy So.-  
lution, and Sts speedy Operation ; and if this Caution should  
not he observed, it remains too long in the intestines, and.  
may possibly give Rise to Very terrible Symptoms ; and it also  
even passes off with the Excrements, which is often the Caso  
with cinnabarine Preparations. *Hafsman. Medicin. Rationale  
System. Vol.* 4. '

Dr. *John Pringle* has, in the *Edinburgh Medical Essays,*Oblig'd the World withan Account of an *antimonide* Remedy  
for a Dysentery, made public by Dr. *Young.* This at the  
first Appearance seems to be one os the most unlikely Remedies  
that could be contriv'd to answer the End proposed. But as j  
have it from very good Hands, that Experience, the only thing  
which can determine the Value of a Medicine, is much in sa...  
your of this, I apprehend an Account of it ought not to he  
omitted in a Treatise os *Antimony,* tho' I have not myself been  
a Witness of its salutary Effects.

*Vitrum Antirnonii Ceratum.*

Take Glass of Antimony in Powder, one Ounce ; Pees-  
-wax, one Dram : Melt the Wax in an Iron Ladle ; then

/ add the Powder; set them on a stow Tire without Flame,  
. . for the Space of half an Hour, continually stirring-them

.with a Spatula ; then take it from the Fire, pour it upon  
a Piece of clean white Paper, powder it,, and keep it for

. .. Use,

When I prepared this Quantity, it lost a Dram os its  
Weight. .The Glass melts in the Wax with a Very, stow  
Tine- ). . . - .

. I was at first so scrupulous in preparing the Medicine, that  
. I wished the Degree of Heat had been assigned, as well aS the  
Space os Time necessary in the Preparation ; but I heve since  
sound, that I both Vary the Time and Degree os Heat, with-  
out perceiving any Difference in the Operation of the Medi-

.Cine.; :

After it has been about twenty Minutes on the Fire, it be-  
: gins to change the Colour; and in ten more, comes pretty  
near the Colour of Snuff: By that Colour I know it is suffi-  
ciently prepared, without attending to the Degree os Heat, or  
- Space of Time.

The ordinary Dose for an Adult, is ten or twelve Grains ;  
' but for the greater Safety, - I commonly begin with six.; to a  
-strong Man Lhave given a Scruple, which sometimes works so  
mildly, that I have thought it too weak. . .

To weakly Constitutions give five or six, increasing the Dose  
afterwards, according to the Operation.

\*’ To a Boy of ten Years of Age, give three or four Grains.  
Ἀ To a Child of three er four: Years, two or three.

. I This Medicine has been practised with Success for the Dys-  
entery, and the Preparation of it was kept a Secret for many  
.Years. - - - . . , . -

' When first.it was communicated to me, I thought it so  
harsh and dangerous a Medicine, that I had no Courage to try  
it for some Years ; and even then I began the Dose -with one  
'Grain, and increased it gradually to twenty, which is the  
largest I have yet given. As soon as I was convinced, by a  
Number of Experiments, that it was both mild and efficacious  
injuring the. Dysentery, I published the Receipt in our *Edin.,  
siurgh* Newsspdpers, being under no Promise of Secrecy with  
regard to this, and being resolved never to make a Secret of any  
Medicine whatever.

*s* I do not expect, that any Physician will incline to give a full  
Dose at first, without better Authority than I can give to  
"Strangers ; but the Cautious may give a small Dose as they  
please, and make first Trials almost in any Disease -where Pur-  
‘gatives 'will do no Harm, and increase it gradually as they find  
it operate. .... „ ρ - . i .

\* I gave it in Dysenteries with .or without Fever, whether  
epidemic or not. I . 4. ; 7

I have tried it often where Blooding and Vomits have heen .  
premised, and where they have not, with Very good Success. .  
w ' I never chuse to give Opiates in ‘ the Beginning, especially  
.where there is-a great Sickness ; because, althed Opium gives  
great'Rehef to some, yet at other times I have thought heth  
the Sickness and Purging thereby increased the following Day..

.1 .never began with a larger .Dose than ten Grains, hecause  
it.frequently operates as violent at first, as twenty Grains at  
last, even upon the same Patient. .. -

' ' In sits Operations, jt sometimes makes the Patient sick, and  
vomits ; it purges almost every Person, but I have known it  
cure without any sensible Evacuation or Sickness ; nay, in  
violent Dysenteries, they purge seldomer with it. than with-  
out it. ... .... ... k pri.susi , ... ......μα'ς. ...

ρὶ If .it purge sufficiently, or fatigue the Patient any way, I in-  
terrnit a’Day or two betwixt each Dose, the same .way as I do .  
With other Purgatives. . ...... .Ψ "

‘’ As I have cured some with one Dose, I have heen obliged, to  
give others five or .six, especially when the first Doses have been  
too mild, and Lhaye often thought a weak Dose , did no good  
in Chronic Cases. Y ' Ἀ .ς. ..... .. . ι

' After the second or third Dose, the Stools are seldom bloody,  
lhe Gripes and Sickness are much abated, and the mucous  
Stools are less Viscid. \ ss } ) ' . -. . j .

Give it with an empty Stomach ; for then, I think, it ope-  
rates most mildly. ' : 2 ' ... . . ψ '

~ Forbid drinking any thing .after it for three Hours, unless  
rhe Patient is very sick, or disposed to VOmIt, in which Case  
give warm Water as in other Vomits. ! ......

- Beware os'giving’it fur a Diarrhoea in the End of a Con-  
iumption. I have cured some other Diarrhoeas of long stand- .  
ing with large Doses of it ; but it has sailed Oftener here than,  
in Dysenteries. *‘s. "'.so-*

s Iforbid thesslse of all ferinentets Liquors, and recommend a  
Milk-diet with Rice or Bread, Chicken-broth, qrWater-gruel. .

- .I give nothing cold, unless it be a Tea-spoon-full of Gelly  
of-Hartshorn, as often as the Patients please ; and sometimes.

I indulge them .with the Gelly of Currans to refresh .their

- Tongue;/.

. It may be given safely to Women with Child, and to Chil-  
dren on the Breast you may give half a Gram.. G. T. *Edin-  
burgh, Med. Essays, Vol. S. .'fr. . - : . . .. ... - .. . -----*

*i Antimony* has in all-times, fince its Medicinal Virtues were  
first discover'd, afforded the Empirics .them most boasted Se-.  
orets, as may he'known bytheTrregularity of their Operations ;.

- for *Antimonial Remediis* have this singular Property, that they  
will sometimes operate with great Violence; and sometimes even  
in the same Dose, and same Person, without any apparent Al-  
teration os Circumstances, shall have no Visible Operation.. . \_

This, if there was no other, is a sufficient Evidence, that  
the Pill Mr. *Ward* first set out with, was'Antimonial, of.  
which there is now no room to doubt ς As to the specific Pre-  
paration he makes use of, it is not Very material, since there:  
are many different Sorts of them made, by depriving this Mine-  
ral of a Part of its Sulphur, and laying the Reguline Part naked, -  
which- will have much the same Effects, in the same, small  
Dose. *set* Y ." ss. ᾶ - .. *su I.so.':*

I shall conclude this Article of *Antimony* with an Account of  
a Remedy, which has lately been Advertised, and for which a  
patent has heen obtained ; I mean, Mr. *Hayustardae.* Powder.  
for the Rheumatism and Gout, which promises no .less than'

the Cure of the iast-mention'd Distemper, after it has puzzled  
all the Physicians in the Worldifor fo many Centuries. It seems  
therefore to he of some importance to examine how far this Re-  
medy is likely to answer the Character given of.it by the Per-  
sons concern'd in point of Interest to promote the Sale, be-  
cause these may he prejudic'd in its Favoun I must, however,  
first’ inform those who are unacquainted with if, that every  
one who takes out a Patent for any Invention, is oblig'd by  
Act of Parliament to specify the Particulars of it, and inroll  
them in the Court of Chancery, within sour ICalendar Months,  
'tnat the World may have the Advantage of the Discovery, and  
the Monopoly for fourteen Years is the Reward for making it.  
After this Specification is inrolled, I apprehend every body, who  
thinks it worth while to pay the Fees, has a Right to have re-  
course to the Inrollmeht.

Mr. *Hayward’s* Remedy then, is a Preparation of *Antimony*and Nitre, made by rubbing them together, till no finning  
Particles of the Antimony are apparent. Of this each Dose  
for an Adult is twenty-seven Grains.

I have hesore observed, that *Kunchel* found seine Relief in  
Pains with which he was afflicted, by taking, pursuant to the  
Advice of the younger *Sormerlus,* crude Antimony ; and that  
*Eunckells* Troches are, at this Day, famous for erratic Pains, at  
*Prancsort* and *Nuremberg,* which are prepar'd of crude *Anti-  
many* ; and I cannot doubt but that crude *Antimony,* join'd with  
Nitre, may sometimes do Service in flight Rheumatic Cases, is  
duly persisted in. But I am far from believing, that it is pose  
fibie to dure any Degree os the Gout by such a Remedy!

With respect to Patents for Medicines in general, it is to be  
observed, that it is not very easy to come at a Knowledge os  
the real Efficacy of such Remedies ; for, in the first Place, it  
is Dot always certain, that the.CaseS which are published by the  
Proprietors, are literally true in every Circumstance ; or, tho3they are, we should only hear of those Cases which were ata  
tended with Success, whereas a thousand Cases, where the Re-  
medy had no good Effect, would he suppressed.

There are, however. People enough in the World of more  
Faith than Understanding, to make it worth the while os de-  
signing Men, to Vend for Secrets the most common Prepara-  
tions os the Sheps, to their own Benefit at least, hecause the  
Prices of these Secrets are usually Very exorbitant.

. I don’t know, that the Price of the Remedy I have spoken of  
above is more extravagant than those os other Nostrums ; if  
not, we may judge os the rest by this.

, The Price of crude Antimony is Four-pence a Pound; and  
never above Six-pence, when bought in Quantities. Nitre is,  
I believe,, at this time, worth a Shilling a Pound, tho' seldom  
so much. Supposing then a Pound of each to he sold at five  
Shillings, for: every twenty-seven .Grains; the whole two  
Pounds will fell for I42 *l.* and some little more, enough to pay  
for the Ingredients.

*Stahl* calls that Tincture of Antimony; which is made by  
throwing *Diaphoretic Antimony,* immediately aster Detonation,  
into Spirits of Wine, and digesting it. *Tinctura Antimstnii Alca-  
lica acris. so ;*

I omitted mentioning above, that .the *Livcr of Antimony* and  
*Crocus Metallorum* are the same, except that the former is .  
unwash'd, the latter wash'd.

ANTIMONIUS LAPIS. The Antimonial Atone. *Mpri  
repsus, Serapim,* and some others, reckon Antimony among  
the Kinds of Stones ; and *Myrepsus* particularly, in *Sect, n  
Cap.* 47O. as *Fuchsias* observes in his Notes thereon.

ANTIMOROS, άντίμορος, from ἁντί, against; and μέρος.  
Death, or a Disease. The true Name, according to *Fnchsius,*of an Antidote in *Myrepsus, Sect.* I. *Cap.* 25. instead of *Dia-.  
tamaron,* as it is there read ; which plainly shews, that *Myrep..*sous tranflated this Composition from some barbarous Author,  
who miserably corrupted the Word ; for forne os the more cor-  
rect Latin Copies read *Antimoros. Fusehe Note on the Place  
above named. -' .*

1 ANTINEPHRITICA; ἀνπνεφριτικἀ, from άντἰ; and νεφρί-  
τις, a Pain in the Kidneys. Remedies against Disorders of the  
Kidneys.. *Biancard.' '*

.ANTIOCHI HIERA, the Hiera of *Aniiochusi* A coma  
pound Medicine, prepared as follows . .

Take of Germander, Agaric, the Pulp of Colocynthis, Stdea-  
chas, each ten Drams twenty-five Grains ; Opopanak,  
Sagapentim, Parfley, Birthwort, white Pepper, each five

’ Drams twelve. Grains; Cinnamon, Spikenard, Troglo-'.  
dytical Myrrh, Indian Leal, each four Drams tenGrainS ;

-"‘Honey a sufficient Quantity. It is good against Melan- .  
choly. Madness, Epilepsy, and for all those whose Blood

' abounds with Impurities. *ArtiusT.eir.gr. Serm.-^. C*

ANTIOCHI THERLACA. The. Theriaca which King  
*Antiochus* the Great used against all sorts of Poison, the Pre-  
scription of which was out in Stone, at. the Entrance os the  
Temple *iAAEsculapius. / .\*\*”* i

Take of Thyme, Opopanax,. Millet, each two Drams  
five Grains Trefoil’Y one Dram two Grains’ and a half ;

...--the Seeds of Dill, Fennel, Anise, Bishops-wced, and  
Smallage, each sixteen Drams fifteen Grains; Meal of  
the bitter Vetch, twelve Drams thirty Grain. Pound

*i them, and sift them,* and afterwards, with the hast Wine,  
- make them up in Troches of half a Dram, one of which  
in a quarter of a Pint of Wine, is a Dose. *Pliny, Lib.*

*.’ „ \_ 2C. Cap.* 24.

AN FIPARALYTICA ἀντιπαραλυτικἀ, from ἀντὶ, and  
Δάλυσις, the Palsy. Medicines against the Palsy.

ANTIPATHES, ἀυτιπαθες. What they call *Antipathes,*is to be accounted *Coral,* tho’ of a different Kind from the  
common Sort. It is of a black Colour, has the Form of a Tree,  
and is more branched than the other. It agrees in Virtues with  
the common Corah *Dioseorides, Lib.* 5. *Cap.* I4o.

ANTIPATHIA, άντιπάθεια, frontiori, against,and πάβος,  
an Affection. Antipathy. It is said to he a kind of occult  
Quality, opposite to Sympathy, when there is a natural, but  
unaccountable Hatred or Aversion between two Things,  
which endeavour to remove or destroy one another. Thus  
*Galen, Lib.* II. *de Simp. Mede Fac.* fays, that some have  
written, that old Leather, burnt, cured Galls by a sort of An-  
tipathy. : '

*Charlton* thinks, that the whole Affejr of Sympathy and An-  
tipathy might be accounted for from the various Morions and  
Configuration, the mutual Cohesion and Combination, or the  
reciprocal Embracing or Repulsion, of the perpetually exhaling  
Corpuscles or Effluvia which meet together. *Castellus.*

ANTIPATRI THERIACA, *Antipater’o* Treacle. It is  
thus prepared :

' Take of Gentian, four Drams ten Grains ; Trifolium,  
.: (stinking Trefoil) sour Drams ten Grains; Seed of the  
fame, two Drams five Grains; Poley, four Drams ten  
' Grains ; Sowbread, two Drams five Grains; Hog’s-sen-  
nel, -Galbanum, each two Drams five Grains ; Parsley,  
four Drams ten'Grains ; Wood-rue, three Drams feven

- Grains ; Pellitory of *Spain,* one Dram two Grains and a  
half; Staves-acrc, two Grains and a half ; Mace, three  
Drams seven Grains j the Root of the white Vine, two  
Drams five Grains ; as much white Pepper ; Gum Am-  
tnoniac, one Dram thirty-four Grains; Mullein, Ground-  
pine, Meaereon, small Horehound, the lesser Fleabane,  
Ethiopian Cummin, Opium, Caston Fennel-seed, Aga-  
ric, Cassia Rufa, the Flower of Juncus Odoratus, Rhe-  
barb, each two Drams five Grains , *Cretan* wild Carrot,  
one Dram thirty-four Grains ; as much Opopanax, Saga-  
pen, two Drams thirty-six Grains ; Southern-wood, one  
Dram thirty-four Grains ; Styrax, Dittany, each one  
Dram thirty-four Grains ; Cinnamon, Spikenard, each  
three Drams seven Grains ; Myrrh, four Drams ten  
Grains; Frankincense, one Dram two Grains and a half  
Saffron eight Drams twenty Grains ; Anise, one Dram

. two Grains and a half -, Cyrenaica Lacryma, (I suppose he  
means Assa Fcetida) one Dram two Grains and a half;  
Hind’s-runnet, three Drams seven Graine ; *Attic* Honey,  
a sufficient Quantity. The Dofe is the Quantity of .a

. Haste-nut. It prevents or cures the Bite of an Asp.  
*Scribonius Largus, Cap.* 42.

- ANTIPERISTASIS, ἀντιπεείστασις, from ἀντἰ, and πεει-  
ὶςημι, to furround. A Straightening, Cohibition, or Compres-  
sion ell around, as for Instance, by the circumambient Air or  
Water » ^d thus there is an Antiperistasis, or Compression  
os Heat or Cold by the circumfus’d contrary Quallty. Thus,  
*Theophrastus, Lib. de Igne,* imputes the Cause why Men are  
more robust, and heve better Digestions in the Winter, to a-  
more potent Cohesion of Heat by an *Anciperijlasts,* Ξνύνέσταλται  
ο). εν τῶ χειμῶνι καὶ συγκατακέκλεςσται τὸ βερμὸν ὑπὸ *iis* παρ-  
θένος, καὶ τἀ σώμάτα πέἠει τἀς τροϊας μᾶλλον, χ) ολως ισχυ.-,  
ρατ.ρμ τοῖς χουμωοτν ἔστιν, οτε συνίθροισται καὶ ἀντιπενὰστεεκε τιϋ,  
θερμω. “ In the Winter Heat is contractsd and inclosed  
". by the circumambient Air, and Bodies better digest their”  
" Food, and are on all Acounts stronger and more robustiri.  
" cold Seasons, from a Coacervation and Antiperistasis of. the  
" Heat.” *Theophrastus. . .'.l--.-* r

ANTIPHARMACUM, ἀντιφἀρμακον, from ἀντὶ, against,  
and φάρμακον, Poison, Medicine. An Antidote or Preserve-  
th'e against Poison. Thus *Dioseorides, Lib. 2. Cop.* I85.  
speaking of Nasturtium, or Water-cresses, fays, ερηνετων ἐστιν  
αιτιῥαρμακον, " It is a Remedy againso the Poison of Rep.  
\*- tiles. " in this Sense rt is the same as ALEjtIFHAR-  
**MAcUM. - - - ' cr-uri**

- ANTIPHTHISICA, ἀντιφβισςκἀ,. from ἀντἰ, against, and  
estesle, a.Phthisis, or Consumption. *Blancard. ~*

*Tinctura Antiphthistca,* a Tincture against a Consumption.

Take os Saccbarum Saturni, and Vitriol of Iton, each an  
Ounce; *French* Brandy, a Pint ; and, without Heat;  
drawaTinctine. *Edinburgh Dispensatory. ' si*

*‘ Quaeucy, in his Englisa* Dispensatory, giyes it thus Ἀ

Take Salt of Steel, and Sacctiarum Saturni, each sour Ounces;

put them into a Matrass with two Pints of good *French*Brandy. Twenty Houts Digestion will make a beautiful  
Tincture.

This is by some accounted a Specific in Hectic Fevers: And  
it is not an unlikely Medicine in such Cases, becaofe it will  
astringe and draw up the Fibres, whereby -their Tone will be  
render’d more rigid, and the Pores and fecretory Passages  
streighten’d, fo that thejuices and Nourishment itself will not so  
soon run off by thofe Ways. -It will also procure a sinner Tex-  
tore to the Blond rtfelf, which, in those Diseases, is almost  
fused and broken. This is also good in many Hysterical Af-  
fections. *P' -- .*

ANTIPHTHORA, ἀντιφθορα, from ἀντὶ, against, andedps.  
Corruption. Α Species of Wolf-bane, fo called because it re-  
sists Corruption. *Blancard. .* ' .. -. i - \*

ANTIPHYSICA, ἀντιφυοτκἀ, from ἀντὶ, and φυσἀω, or φυσ-  
σάω, to blow. Remedies against the Wind, **ike CARMINA-**TIvEs.

ANTIPHYSON, a Name for the Loadstone in *Marcellus  
Empiricus, Cap.* I.

ANTIPLEURITICUM, ἀντιπλά'είτικὸς, from *disti,* against,  
and πλἀ/είτις the Pleuriiy. Α Remedy against the Pleurisy.  
*Blancard. . .*

ANTIPODAGRICA, αττιποδαχικά. The same as *Ants.,  
arthritica,*which see before.

ANTIPRAXIA,avhispwiia,from ἀιτμαηδπρονὰω, to world  
A Word which signifies a Contrariety of Functions and Tem-  
peraments in different Parts, and was ofed by the Antients to  
express the Variety of concurring and often contrary Symptoms  
in Hypochondriacal Affections, as when a cold Stomach is join’d  
with a hot Iiver. *Castellus.*

ANTIPYRETON, ἀντιπνρἱτὸν, from ἀντὶ, against, and  
πυρετὸς, a Fever. A Febrifuge, or Remedy against a Fever.  
*Castellus. ' -*

ANTIPYREUTICON, or, ANTIPYRETICON. The  
same as the. preceding.. *Blancard. ;*

ANTIQUARTANARIUM, ANTIQUARTIUM. A  
Medicine against a Quartan. *Blancard. . .*

ANTIQuJI MORBI, old or inveterate Diseases, which are  
lengthen’d out heyond the fortieth Day, perhaps to very many  
Years; Chronical Diseases. - so

ANTIRRHINUM, Ostrc. *Antirrhinum minus.* Ger. 439.  
Emac. 549. *Antirrhinum fylvestre medium.* Park. TheaI.  
1334. Mer.-Pin: 9. *Antirrhinum primum Mostthiolo,* Merci  
Bot. I. 2o. Pbyt. Brit. 9. *Antirrhinum arvense,* Rivim Irr.  
M. 82. Dill. Cat. Giss. I27. *Antirrhinum arvense majus,*C. B. Pin. 2I2. Toum: Inlb stS. Elem. Bot. I37. Boemi  
Ind. Α. 233.- Rupp. Flor. Jen.’ I96. *Antirrhinum arvensie  
minus.* Hub. Oxon. 2. 505. *Antirrhinum angastifolium seyl.  
vestre,* J. B. 3. 464. Raii Hist. I. 760. Synop. 3. 283.  
*Antirrhinum angastifolium quibufdarn, minus aliis.* Chub. *A&u.*SNAP-DRAGON, or CALVESosiNOUE. ss

*Antirrhinum* is also called *Anarrhinum,.* and by some *Lychnia  
Sylvestres.* The Stalk and Leaves of this Plant resemble those  
of Pimpernel; the Flowers are purple, and like the Stock-  
gilly-flower, but. smaller, for which Reason it has the Name  
*os Lychnis Sylvestres.* It bears a Fruit like a Calf’s-Snout,  
and of a carnation Colour. - . - -

The Plant, worn as an Amulet, is said to have a secret Virtue  
against Poisons, and to confer Gracefulness on the Perron who  
is anointed with the fame, together with the Oil of Lillies,  
or of *Cyprus. Dioseorides, Lib.* 4. *Capi* I 33.

*Antirrhinum,* apply’d as a Pessary, with Honey, and Oil  
of Rofes, helps the Strangulation of the Uterus, and a Difficulty,  
of the Menses: *Plin. Lib. 26. Cap.* i3.

*. Antirrhinum* has the Virtues of the *Bistonium,* (Starwort)  
but in a weaker Degree. *Paulas Acginet.*

- Of this Herb there are several Species, such as the *Actirrhia.  
num Officsm* the *Primum Aiatth. the JIAinus Tab. th^ Minimums  
Lib.* the *Sylvestre Dod.* the *Sylvestre Medium,* Park, the *Ar-  
venfentajus. Cl.* B. and some others. It is the *Bucranion of  
Galen,* the *Cynecephalion* of *Apuleius,* and the *Os Leonis* of Co-.  
*lumella. ” ’ ” .*

It is found in great Abundance in the Fields, and sometimes,  
in Gardens ; but this fatter Species is larger than the former, :  
and must be-renewed by fresh Sced. Its various Species are.  
of various Colours, yellow, for instance, red, purple, and  
carnation, but all of them have prickly Mouths r For this  
Reason *Columella, Lib.* Io. calls it *Sava Leonis Ora.*

. The Whole of this Fruit is sometimes found in Apotheca-  
ties Shops. But it is never nfed. except by some foolish and  
superstitious Women, who fondly imagine it to be a Prefer-,  
vative against Spccties, Sorceries, and vVitchcrast. For this.  
Reason they-put it into their Childrens Cradles, perfume,  
their Beds with it, put it into their Shoes, and keep it in theis  
Houses, in order to banish Spectses, and prevent Witchcraft....  
*Theephrast. Hi Plant. Lib. g.' Cap. 2,1.* fays, that it contd-r  
bates, in forne measure, to a Person’s acquiring Fame and Re- ς  
putation.:.It-is also said tocure the Tailing-sickness, when worn  
about

about the Neck. *See Plin. Lib. Cap. so.^Joh. AgrieaL  
Chirurg, parv. Salmas, ad Solin. Jo Johnston Thaumatoaer.  
Chases. S. Cap. I. , G. Hi Vilfch. Not. ad Rausiter. Jo. ifr.  
TPeddel. Amon. Motor. Med. Franc. Paulin. Tr. de Bufone,  
fiylv. Rattray Tr. de Synapath. et Antipath, in Tbeatr. Sympa-  
thet. et Job. Hick. Cardiluc. Part.* I. where he makes, men-  
lion of some Medicines prepared of it against Witchcraft. Its  
Seeds are also an Ingredient in the foetid Plainer of *Mynsicht,*the Use os which is wonderfully recommended against *Spells.  
.Mattheolus* says, that at a Gentleman's House he saw It tied  
about the Neck os a Dog, who was chain'd and bark'd Conti-  
nually, but especially when he saw a Stranger ; but that, for  
eight Days past, this ’ Dog had not bark'd at all, whereas upon  
taking this Herb from about his Neck, he immediatelv began  
to bark. The Water in which this Herb has been boil'd, is  
said to.cure the Jaundice, is drank.

This is a Plant of which *John Bauhin* describes three differ-  
ent Sorts. The first sends forth several Stalks, about the  
Height of a Foot and a half, and sometimes more than two  
Feet, full os a "white Pith, the Leaves resembling those of  
(Leucoinm,. or) the Stock-gilly-flower, of a somewhat acrid  
Taste : The Flowers surround ’ the Extremities of the Stalk,  
are of a carnation or 'white Colour, and of an oblong Figure,  
or in the Form of a Pipe, 'which represents at the Endo CaPS  
or Lion's Snout; from whence the Plant lakes its Names 'The  
Flower is succeeded by a Fruit resembling a Dog’s Head, or  
rather, that of a Hog, containing small black Seeds : The Root  
as woody and white.. . / .\*. - . ί . I' ί.  
u The second is xalled *Anarrhinum scu. Lychnis Syluostris,* of  
*Dioscorides,* called in *French Mourin Violet* (or Pimpernel of  
*as* violet Colour) ; it sends forth a Stalk and Leaves resembling  
those of Pimpernel : The Leaves are shaped like those of Leu-  
coium, or the Stock-gilly-flower, but lesser, of a purple Co-  
lour. . ’ 1 . .. . . :

...» The third is called *byPliny, Anarrhinum, feu Lychnis agria,*resembling Flax ; the Flower like that of Hyacinth; the Fruit  
ofthe Figure of a Cals is Snout. The Root is very small.

s. Calves-snout grows -in Fields,: and fandy Places, which are  
Cultivated, and in Vineyards. i- - --

*W* This Plant'is but seldom usedin Medicine: Some pretend,  
that the Root of that first defcrihed is-Proper for Deductions of  
acrimonious Humours in the Eyes ;-and that, heing carry’d  
abou t with one, in resists the Effects of a bad Air. *Lemery des  
Drogues.* 7 . .so -

ANTIRRHOPE, ANTIRRHOPIE, ἀντιῤῥοπό, ἀὑτιῥῥοπὸν,  
from α-.τ s, against, and *sura,* to incline. A Propension to the  
contrary Part. In this Sense the Words are used by *Hippocra-  
tes, Lib. digit* ἄρθρων.; -

. ANTISCOLICA, from *dosc,* against, and σκώληξ, aWorm.  
The fame aS ANTHELM1NTICA. - *Blancard.* .I

ANTISCORBUTICA, Remedies against the Scurvy.  
*Bldncard. - - ‘* .. \* . . -i . ’’ ' 1 - et.

i ANTISCORODON, άντισκόροδβν, from ἀντι, and σκόροδον,  
Garlick. A Very large Species-of Garlick, otherwise called.  
*Allium Ulpicum.* It is also called *Aphroscorodon, dcpapeseassts-cv,*from ἀφρὸς, Spume,' or Froth ; because, when beaten with Ost  
and Vinegar, it generates abundance of Spume. *Gorrcaus.*

ANTISECOSIS, ἀντισηκωσις, from άντισηκόω, to make equal,  
or put in ./Equilibrium, which Verb is from άντἰ, and σηκὸς, a  
Weight. Compensation.: The Verb ἀντισίνκῶσαι as thfed by  
*Hippocrates, Lib. de Rat.Vict.in Morb. acut.* to signify the  
*compensating,* to such aS use to eat twice in a Day, the Loss of  
a Meal, τὸν quin Ιυν το ἔθος κενεαγ{ήσαντα ξυμφέρβ ταύ-  
τήν τήν ήμέρην άντισηκιῦσαι. " He who thus labours under an un-  
" usual Exinanition of the Vessels, ought to *have Compenfa-*" Iron for this Loss on this Day. "

- Again, *Lib. de ArtsuOre* ἀσφαλεστέρως ἄν τὸ *aZpea,* τὸ urisemaj,  
*ri* J τῇ ἀιτισηκωθεέν μετεςυριι&έν. " Because the Body . being  
" more securely suspended, equally ponderares this way and  
" that way. ” Hence-ἀρτισίνκωοκ is also the fame aS ἀρτιστἀθμηοςς,  
an Equilibrium.

*Z* ANTISPASIS, ἀντἰσπασις, from ἀπὸ, and σπἀω, Io draw.  
A Revulsion. This is a Retraction, or Aversion of a stowing  
Humour to a contrary Part. It is properly apply'd to a Humour  
actually in Fluxion, in order to divert its Course a contrary  
Way; for a Humour which is already settled on. the Part, is  
not said to he cany'd off by *Revulsion,* but by *Derivation ,* be-  
cause it cannot he evacuated but by the Parts situated near the  
Place affected. Revulsion is made to a contrary Part, .and sar  
distant from the Seat ofthe Disease There are four Species os  
Revulsion, according to the Difference of Position ; . for it may  
he made from a superior Part to an inferior, from the Right to  
the Lest, from the Fore-part to the Back-pars, from an inter-  
nal to an external Part, and the contrary to all these respect-  
ively. *Galen Meth. Lib. esc Cap.* 3. and *Lib. An Cap. As.*assures us, that Revulsion in Medicine was the invention of  
*Hippocrates,* where he seems to have in View the Beginning of  
the Treatise περὶ χυμῶν, whence the Rules for Revulsion ate  
taken. \* In *Aph.* 21. *Sect.* 2. *Lib.* 6. *Epid,* he directs ιἐντισπαν  
ἤν μἡ ρ δεῖ *surest nr* δοῖστ τητέοισι .δει στομίν, όςως εκαστα

*poor&i* " Where Things tend the wrong Way, we Ought **to**po make a Revulsion ; but if they seem to tend a *riatit* Course,  
An a Way-’.is to he open’d for each to follow its natural Pro-  
pensity. " *Garreaus. Foesius.*

ANTISPASMODICUM, from ἀντ?, against, and σπασμός,  
a Convulsion. A Remedy against Convulsions. *Blausard.*

ANTISP-ASTICON, ἀιμσπαστικόν. A general Epithet she  
any Medicine that works by way of Revulsion. *Galen. Lib.*-I3. *M. Me Cap.* II. ’ -

ΑΝΤΙδΡΟΟΑ,ἀρσίσποδα, from ἀπὸ, against, instead of, and  
ίσπόδιον, or-σποδὸς-, Spodinm (Putty). Medicines endu'd with  
the same Virtue as Spodium, and for want, thereof may he  
substituted in its room, τ

Since *Antifpoda are -very serviceable* when Spodium cannot  
he had, as it often happens, it will be necessary to shew what  
things are equivalent to it, and after what manner they ought  
to be used. ' - ' ' . - -

Take then the Leaves of Myrtle, with. the Flowers and  
Berries, before they are ripe, and put them into a crude  
(unbak'd) earthen Pot, and, stopping it up with a Cover  
full of Holes, *set* it in the Potter's Furnace. When it is  
throughly baked, transfer the Contents into another crude  
Pot; and when this also is sufficiently harden'd, take them  
out, wash them, and use them.

After the same manner may be prepared '

The tender Shoots, with the Flowers of the Wild Olive-  
tree, if they can be procured ; if not, those of the  
.. Garden-kind may-supply their Place. - Is neither of these  
are to be had. Quinces cut in Pieces, and their Cores  
taken out. Galls, linen Rags, unripe or white Mulbera  
Ties, first dry’d in the Sun , Mastich, Turpentine, Oe-  
nanthe, (Dropwort) the tender Leaves of the Bramble,  
the Leaves of -the1 Box-tree, or the Bastard Cyprus with  
its Flowers, any or either of these, thus prepared,1 will  
. serve the Turn. -Some take the tender Boughs of **the**

Fig-tree, and first drying them in the Sun, prepare them  
.in the same manner. Some take BullS-glue, others rough,  
greasy Wool, which they smear with Pitch Or Honey,  
and prepare as aforesaid. All these before-mentioned may

**.he used as** *Antifpoda.' Dioscor. Lib.* **5.** *Cap.* **I 86s**

*Pliny, Lihe* 34. *Cap.* I3i introducing his Account *DsAntsu  
fpoda,* has this .beautiful Passage : *Nec in alia Parte magis est  
' Vitee Ingenia rnirart, quippe ne inquirenda essent Metalla, ustise  
simis Rebus'Uiilitates eajdem excogitavit: - p-* The human Saga-  
." city in providing for the Accommodation of Life-is in no  
." respect more admirable, than in preparing Medicines of the  
" cheapest Materials, to supply the Want of Minerals." He  
then goes on to enumerate the Antifpoda, which, with the  
Method of. Preparation, are all the same as in *Dioscorides.*

ANTISTATHMESIS. See ANTISECOSIS.

- .ANTISTERIGMA, *distrtieeypea,* from αντιἹ against, and  
σίνριγμαγ any thing that sustains or bears up another. A  
Fulcrum, Prop, or Crutch. *Hippocrates, Lib. de Artie.*

. ANTISTERNON, ἀντίστερνον, from *cirri,* against, and  
v4pvov2.the Sternum, or Breast-bone. The Back, so called,  
because it is opposite to she *Sternum.*

ANTITASIS, ἀντίταονς, from άντἰ, and τεἴνω, to extend.  
A Contra-extension. When dislocated Bones are first drawn  
back, in order to their meeting in one strait Line, this Retraction  
to opposite Parts is,, hy *Galen, Meth. Med. Lib. 6. Cap.* 3i  
called *Antitasis. Castellus.*

ANTITHENAR, ἀντίθεναρ, from ἀντἰ, against, and θἐναρ,  
the Palm of the Hand. The Muscle called ADDUCTOR Ala  
INDIC ΕΜ, which see. '

ANTITHORA. The fame as ANT NORA.

ANTITRAGUS, ςέντίτραγος, from ἀντι, and τραίγος.  
*Ruffus* describes into he the-thicker Parr of the Anthelix, op-  
posite to the Tragus. See ANTHELIX and TRAGUS. -

ANTITYPUS, ἀὑτίτυπος. See RENISUS»

ANTIVENERKA, Medicines against the *Lues Vinerea.*

*Blancardi "'*

ANTONII SANCTI IGNIS, the St. Antony's Fine.

\* ANTONIUS MUSA, a famous *Roman,* Physician to An\*  
*gustus Caesar.* See MUSA.

. ANTOPHYLLON, ANTOPHYLLUS, ἀντῥαυλλον, the  
Name of the Male CaryophylluS, so called by *Anstfentta,* be-  
cause of its Thickness. *Fuchsiusts Note in Myrep. Aniido  
Cap.* 22. According to *Ray, Antophyllus* is the Name which  
the Druggists have- for the mature and full-grown *Caryar  
phyllus.. '*

ANTRISCUS, *Antris.cus* Plinii, *quibus.dam Semine longsi  
Cicutariasae vel Chaerephylli, f.* B. - *.Charaphyllum Sylvestre,***C.** B. *Cerofolium Sylvestre.* Tab. *Apium Sylvestre,* Ger. Ico.  
*Daucris Beptanius,* Ger. Col.

Is a Plant about two Feet high, branchy, and hairy ; **the**Stalk-isof **a** greenish Brown, reddish, and rough, moist in **the**

Inside ; the Figure of the Leaves resembles those of Chervil,  
or that of *Hemlock,* beautiful, almost insipid ; the Flowers are  
form'd in Umbels at the Top os the Branches, each compos'd  
os five white Leaves; the Seeds are flender, longish, black, of  
an aromatic Taste, resembling those of Chervil, but smaller ;  
the Root is simple, woody, white, and aromatic, os the Taste  
..Of a Parsnip: it grows under Hedges.. It contains essential  
Salt, Oil, and a great'deal of Phlegm. .'

It is aperitive, but littie used in Physic. *Lemery des  
Drogues. ...... ‘ .*

. ANTRUM BUCCINOSUM, the Cochlea, or labyrinth  
.of the Ear. *Castellus.. -*

ANTYLION, αντὑλιίν, the Name of a Very astringent  
.Malagina described by *P. AEginet. Lib. y. Cap.* 18.

ANTYLLUS,or ANTILLUS,avery famous antient Phy-  
sician, cited by *Oribasius, .Lib. 2. Euporist.* by *Artius, Totrab. i..  
Sertn.* 3. and in many other Places; by *P. AEginet.* who calls  
him' the SURGEON, *Lib.* 3. *Cap.* 4o. and *Ltb.* 6. *Cap.* 33.  
and *fab. y. Capi* Io. and 33. *len BtobaussoSerm.* qq. *Avifemia,  
Dib. cs..* and *Raasis, Lib.* 2. *Continentis, Cap.* 2. and in many  
Other Places, being I suppose the same Person as his *Antilis, er  
Antiles* ; for this Diversity in proper Names, in him and other  
*Arabian* Anthers, proceeds from the Fault of the TranIlator,  
as well aS the Transcribers. *Fabricius.*

ANUCAR. Borax. *Rulandus..*

ANUS. The Orifice of the *Intestinum Rectum,* by which the  
excrementltious Foeces are discharg'd out os the Body, by Stool.

Affections about the Anus are difficult to he cured for many  
Reasons. The Part is endued with a Very tender Sense, and  
therefore is easily irritated by acrimonious and austere Medi-  
pines. Besides, .the Superfluities of the Aliment-in their Pas-  
sage are not only acrid in themselves, but much more so on ac-  
count os the bilious, and sometimes serous Humours, which  
pass along with them. Moreover, the Physician can fix no cer-  
tain Times for attending his Patients,: who sometimes go forth  
to ease Nature this way ar an inconvenient Season. The Hu-  
midity and Heat of the Places also, which require drying as  
well aS cooling Remedies, are no small Obstacle to.the Cure of  
Ulcers in those Parts. ..For Astringents are acrid,, which the  
Place, by reason of its exquisite Sense, is not able to: heat.  
Wherefore such Medicines agree with them as are astringent  
-without Asperity; of which Quality are principally Metals,  
which are neither, acrimonious, nor .extremely rough ; these,  
washed, answer theIntention, and do theWork effectually with-  
put Mordacity. *Aetius, Tetrab. An Serm.T.Dap.A.sXQsri Galen.*

*. Of .the* **RHAGAD-Es** *of the* **ANUS.’ . 1**

- The *Anus* is subject to many, and those very troublesome  
Diseases, which are cured by Methods not much different from  
One another. First of all, the Skin often chaps in many Places,  
which Disorder is thy the *Greeks* called ,ῥαγάδβα. If it he re-  
qent, .the Patient ought to keep himself at Rest, and sit in  
warm Water. Pigeons Eggs also are to he boiled, and when  
they are hardened, are to be cleansed, and white one lies in hot  
Water, the Place is'to be fomented with another, that the Pa-  
tient may for fome, time,use them both in their Turns. Thea  
the Tetrapharmacum, or Rhypodes PlaisterS, [See *the Composi-  
tion of Tetrapharmacum under* **ABsCESs,** *and of* **RHYPODES,***sendcrjhat lde ord]* ure' to he diluted with Oil of Roses, or fresh  
greasy Wool is to be moistened with liquid Cerate made of Oil  
of Roses, or Lead washed is to be added to the same liquid Ce-  
Iate, or Myrrh mixed with Resin, of Turpentine, or . old Oil  
with Litharge, and the Place is to be anointed with any one  
of them. Is the Disorder lies all outwardly, and. the inner  
Parts are sound, Lint impregnated .with, the same Medicine is  
Io he laid upon the Place, and whatever else is apply'd must be  
covered with a Cerate. Tn this Case we must abstain from tart  
and acrimonious Meats, and such as bind the Belly. No dry  
Food is proper, but. in very smalls .Quantities; but liquid,  
smooth, fat, and glutinous Aliments are best. Nothing hinders,  
hut that the Patient may drink the mild Sorts of Wines,  
*Celsius, Lib. 6. Cap.AS. ...ss ..*

**\_ '' TIT σ CONDYLOMA.**

A Condyloma is a Tubercle usually generated from an Inr  
flammation. When it is form'd, thesame’ Directions*As Ao*Meat, Drink, and Rest, are to be observed as were hefore pre-  
scribed *for* the Rhagades. It will be proper to.foment the Tum.  
.bercle with the same Eggs but before this, the Parientinust  
lit in a Decoction of some Repellent, as Vervain; after this,  
iou would do well to apply some Lenti is with a little Honey,  
delilot helled in Wine, or Leaves of the Bramble-hush bruised  
.with Cerate made of the Oil of Roses3 or a Quince *;.oj the*inner Part os the Rind os Pomgranates bruised with the same  
.Cerate; or Vitriol first boiled and bruised, and then mixed with  
greasy Wool, or Oil of Roses; or the following Composition :;

TakeOf Frankincense, one Drarn two Grains and. an half.;  
e *y* Plumous Alum, two Drams five Grains; Ceposs, three  
si.. Drams seven .Crains and an half; .Litharge,’ fiye Drains

tweIVe Grains and an half; bruise them, and while yon  
are so doing, instil thereto Wine and Oil of Rofes by  
Turns. The Bandage for the Place must be of Linen, or  
a square Piece of Woollen, winch at two of its Angles has  
Loops, and opposite to them as many Fillets. The Piece  
being placed underneath, the Loops- come against- the  
Belly; and the Fillets, being brought about behind, are  
pasted through the Loops ; and where they are streightened,’  
cross one another; and proceed the Right towards the  
Left, and the Left towards the Right, and, heing brought  
about the Belly are at last ty'd together in a Knot.

If the Condyloma he grown inveterate and hardened, and.  
will not yield to the Remedies before-mentioned, it may bo  
consumed by the following Caustic:

Take of Verdigris, two Drams five Grains ; Myrrh, four  
Drams ten Grains; Guin Arabic, eight Drams twenty  
Grains; Frankincense, twelve Drams thirty Grains; Anti-  
mony. Opium, Acacia, each sixteen Drams, forty Grains.

Some use this Composition to renew Ulcers in the. Rha-  
gades. If the Condyloma resists this Medicine,, a stronger  
Caustic may he apply'd. When the Tumor is consumed, we  
must exchange it for gentie Remedies. *Celsius, stab.* 6. *Cap.* IS..

*Os.* **RHAGADES** *and* **CONDYLOMATA.**

A Tuhercle in the *Anus,* which they call a *Condyloma,* con-  
fists in a preternatural Intumescence os some Wrinkles os. the,  
folded Bedies of the Anus; for the Anus heing sinuous, or  
full of Folds, must he set with Wrinkles. . When this Wrinkle  
is elevated into a considerable Tumor, it incomes a *Condylomas*which is. sometimes without an Inflammation, and sometimes-  
attended with an Inflammation, Pain, and Hardness. . -l  
. The *Rhagades,* or Fissures, sometimes affect the *Sphincters,*sometimes the *Anus,* and owe their Original sometimes to the  
Acrimony of the Humours,, sometimes to a *Condyloma,* which,  
being inflamed and distended,, causes a Rupture, or Fissure, in  
the Parts about it. . . . J

They are cured in the Beginning by Medicines-; but, is  
neglected till they grow hard and callous., will require the Ast-  
fistanee of as Surgeon. In this Casey, for tire *Condyloma,*Patient must .he placed in a fit Posture; and the *Condyloma,* heing  
taken up and distended with the Forceps, must be cut quite  
away ; hut for the *Rhagades,,* they must have their callous Lips.  
.scraped with the Knife,, that there may he a new Ulceration,  
-winch shall, be more easily cured.. After the Operations, Di-  
gestiVes, Mundificatives, and CicatrizerS, .are to be apply’d. .

Medicines .proper: in the Beginning are,, for a *Condyloma,.*which contract and Consume it, the following a - . -

Put Misy roasted into liquid Turpentine, and make them  
into" a Plainer, and apply the (ante, after fomenting, the  
Place with warm .Water. This is an admirable Remedy *J*

Another; the Author, *Lucius,* for Inflammations, *Rhagades,*or *Condylomata* of the yfous ; it is good also for inflamed Rhe,-  
*gades* of the *Pudenda: ‘ .*

**Take of Ceruss, fix Ounces forty Grains ; litharge of SiI.**

Ver washed, two Ounces fifty Grains; Recrements of  
.Dead washed, Plumous Alum, Frankincense, each two  
- . Ounces forty Grains; bruise them in old white Wine,  
and mix them with Corate of Myrtle and Roses. It is  
good for foul Ulcers os the *Anus,* but especially about the  
Corona Glandis, and the Praeputium, which cannothe de-  
’ terged with Lint, and are exasperated by Medicines adapt-  
nd to the Nomae. In short, astringent Embrocations are  
to be used in Condylomas, and their Remedies ought to  
participate of an astringent Quality- :

Another os *Andromachus,* which he uses, as he says, for  
inflamed *Rhagades* and *Condylomas : prise*

Take of the. Lapis Haematites, or Blood-stone, Gum Am-  
. moninc. Frankincense, Round Alum, each twelve Dramd

; thirty Grains (in. another Copy, sixteen Drams forty  
.: Grains) ; Galls, Saffron, each one Dram two Grainsand  
. an half; Turpentine, four Drams ten Grains; *Tyrrhe-  
; nian* Wax, twelve Drams thirty Grains; Oil of Roses,  
.. ten Drams twenty Grains ; use it for the *Anus* with Oil  
of Roses; for the Uterus with Oil of Salca. [SeeSALCAJ.

*- - Aecius, Tetrab.* **4.** *Serm. 2.. Cap.* **3. !.\***

***Of* CONDYLOMAS, TXTUBERANCES, awrf RHAGADEs. i**

;. A.i.Condyinma in the AnuS differs only in the Place from a  
Condyloma, in the Pudendum Muliebre, being a rugous Ex-  
cresceoce consequent upon an Inflammation orFisihre. First,  
Iris called a *Tubercles* but when, st is. grown Callous» a *Condors*

*lorna.* Both the one and the other are to he taken with the  
Forceps, and cut off; and the Dure is to he managed with Ci-  
catrizers. As for the *RJjagades* which are caused by hard FCeceS,  
and are flow of healing on account os their Callosity, we heal  
them ; or by scratching them with the Naiis, or the Knife, dis-  
pose them the more readily to Cicatrize. *Paulus AEginet.*

. Lib. 6. *Cap.* 8O. .

*Of a* **THYMUs** *of the* **ANUs. —**

The Appellation of *Thymus* is taken originally from the Tops  
of the Herb of the same Name, [Thyme] which grows upon  
Hills. A *Thymus* in the Body is a rough, reddish, oblong,  
tuherculous Eminence, winch, when it is taken off, discharges  
more Blood than in proportion to its Bigness. It very com-  
monly affects the Parts about the *Anus* and *Pudenda,* and also  
the Middle of the Thighs, and sometimes it appears in the Face.  
This Sort of Excrescence, when small, is called *λ Thymus;*.when of an excessive Bigness, a *Ficuss,* and sometimes it is  
mild, sometimes malignant. The mild *Thymus* is a small un-  
even Caruncle, winch has its Superficies exasperated by obscure,  
or scarce perceptible Eminences, of a whitish Colour, or some-  
.what red, and Void of Pain. But the malignant *Thymus is*.harder, rougher, and larger, and of a soeculent and livid Co-  
lour, painful, and causing a pungent Sensation, and is Very  
.much exasperated by Handling, or the Application of Medi-  
nines. A mild *Thymus* is easily cured, but a malignant one is  
incurable the' this latter is sometimes cured not by local Ex-  
section, but by taking off the Part in which they grow.

For a *Thymus,*

. Take dry'd Sage, and: pound .it with dry'd Figs, and let the  
, : Patient eat thereof, and the *Thymus* will disappear. For  
the same Disease in Cattle, expose . Barley to the Dew,  
and strew the same Herb among it, and let them feed  
.. .. . thereon, and you. will see Wonders,

*.Fora* **THYMUS** *in the* **ANUS, PUDENDUM,** *or any other Part  
. st of. the Bode. '*

Take os Plumous Alum, Vitriol burnt, Glew,.each one  
.- Ounce twenty Grains ;. of. Squama yens, two .Ounces  
forty Grains, bruise them, and put them in Glew that

.... has heen before dissolved in Water, .and anoint the Pisce.

**, ι** *Aetius , T.etrab. An Serm.L. Cap. An*

*- Os. a* **FUNGUS** *of the* **ANUS or UTERUS.**

An Ulcer, like a Fungus, frequently affects the same Parts,  
.which; if it. happens in the Winter, must he fomented with  
' warm, in the Summer, with cold Water. After this, the Place  
must be sprinkled with Squama jEris, and upon this must he  
-apply’d a Cerate made , of Oil of Myrtle, mixed with a little  
-JLitharge, Soot, and Dime/ .. If it. cannot he removed by these  
or suchrlike Medicines, Dr by others of greater Vehemence and  
.Force, it must he-cauterized .with a het Iron. *Celsius, Lib.* 6.  
*JCap.lSs. .. ... . eororsta. 's-:‘ ... '*

**’ 'so- syrz»/HEAREsinndNoMAE** *of the* **ANUS. '**

\. Sometimes the Anus is infested with a *Herpes* and *Noma:***.If**a *Noma* affect the Sphincter of the *Anus,* the Disease must he  
c carefully treated in a .Method adapted- to the Cure of a *Noma;*for the Sphincter,, being one of the interior Parts of the *Anus,*and Very nervous, cannot bear cutting or burning, an Abscission  
of any Parr of .that Muscle being followed with Convulsions,  
with a Wasting and Decay of the Caruncle. This we know  
fry Experience; for oftentimes when,; for want of due Surgery,  
-the Sphincter has heen consumed by *sms.Noma,* the Wasting of  
; theCaruncle has. been the Consequence. We must therefore  
Jbave recourse to such Remedies as are proper for a *Noma* ; such  
-are: daily Embro&tions -with the Decoction of Myrtles, Rind  
4.LPomgranate,wthe Bramble, and i the. like. And first let us  
cauterize the preternatural Corpuscles with the Trochea called  
*.Fdastine,* [See FAUsiTiNEj dr some such thing; then rffe burnt  
Paper, and afterwards apply the Plaister *Ists,* [See ISIS] dissolved  
in Plenty.of Oil osRoses, and spread on Linen. , . .n "  
.4. When a Phagedenic Ulcer in *side Anus.* spreads, thy eating,  
jfomething must; be attempted, and a Stop;put to it by dividing  
Ihe corrupted Parts from those which are sound; with the Knife ;  
.after; which, apply .an .actual Cautery to ..the Place ; for the  
podex,, being a fleshy Pars, can. easily.: hear the Operation.  
The Cure, after the Operation, is to be managed like that of  
other Ulcers; but where Burning has been used, it will he  
proper to use the same Remedies aS we have before prescribed in  
rhe like Circumstances under a *Prolapsus Asti: Aetius, Totrab.  
An Serrn. 2. Cap.* Io. J Λ i. . .... sc .

*Tubercles, Condylomas,.Crisias, Ficus, and Fungus, of the* **ANUS.**

Sometimes the *Anus* is infested with Tubercles at the Extre-  
Inity of the intestinum Rectum, which arise both on the In-  
side and Outside- Though these Tubercles are divided into Va-  
rious Species according to their Magnitude and Figure, and are

sometimes called *Condylomata,* sometimes *Crista,* sometimes *Pi.,  
cus, or Fungi,* yet they all seem to agree in owing their Origi-  
nal partly to a Redundance, and partly to a Corruption of the  
Blood, that stagnates about these Parts, and especially the Glam»  
dales, whence they insensibly increase in Magnitude like a Po-  
lypus in the Nose, orthose Tuhercles which arise in the Uterus.  
They often molest those who are subject to the Haemorrhoids ;  
nor are they only troublesome, but sometimes accompansid with  
acute Pains ; so that the Patient cannot sit down without much  
Difficulty, and is forced to . implore the Help os a Surgeons  
Such *tubercles* in the Pudenda are judg'd by *Celsius,* to be of  
the worst Kind ; and I have often discovered in them . some  
Seeds of the LueS Venerea. Hence it is no Wonder, that the  
Antients, who knew no Remedies for the Venereal Distemper,  
judged- these to he the worst Sort os Tubercles. '

The Cure of these must her managed like that of other *T.u\*  
bcrcles,* and carnous Excrescences, which is by Extirpation, by  
means of a Ligature, or Abscission with the Knife or Scissars,  
except their Root be too large; bv this Operation I have cured  
several Sorts of them. If then Root be so large aS to admit of  
no Ligature, the *Tubercle* is to be distended with the Hoek or  
Forceps, and most exactly cut off with the Knife or Sciffars,  
The Wound being made, the Blood must be suffered to run  
for some time, according to the Strength os the Patient, in order  
to prevent an Inflammation ; then, aster the Use os Styptics,  
Lint and Bolsters are applied, and the Wound is bound up.  
The Cure is carried on with Vulnerary Balsams, and some dry-  
ing Ointment, and at last with dry Lint, to promote Congluti-  
nation. If in the subsequent Dressings any foreign Matter is  
observed to remain aster the first Operation, Care is to be taken,  
that it be exactly cut off with the Scissars, or eaten quite away  
with blue Vitriol, Lapis Infernalis, or such-like Caustics. In  
many Cases the entire Tubercles themselves may conveniently  
enough be extirpated by the Use of Corrosives, as *Celsus* former-  
ly advised, if Care be taken, that they do not hurt the Intestine  
or Sphincter. The Antients, when they could not remove  
them by Medicines, advised the Application os actual Caute\*  
Ties. *Heister. Instit. Chirurg.*

*Os. an imperforated* Anus.

Sometimes in new-born Children the *Anus* is naturally im-  
perforated, being closed up with a Membrane. In this Case  
the Membrane is to be broken with the Finger, is it be possible,  
: or else cut off with the Knife, and the Place must he healed  
with Wine.

Often also in grown Persons, by means of an Ulcer ill cured,  
there happens a Coalition of the *Anus.* In this Circumstance  
also the Part must be opened with an Instrument, and for the  
more convenient Management os the Cure, and to avoid a new  
Coalition, a leaden Pipe, or Cannula, anointed with some Epthe  
lotic, is to be put in the *Anus,* and worn till the Cure be per-  
fected. *P. Anginal. Lib.* 6. *Cap.* 8I.

*The Method of making an Asserture in the* **ANUS** *when impegi,  
forate. ’ s*

It sometimes happens, that a Child is hem with the *Anus*quite closed up, contrary to the Disposition of Nature. These  
are called by Physicians *Atreti,* [from α Neg. and τραπὸ to per-  
forate] *imperforate.* The Child is immediately perceived to  
. labour under this Defect, if it has not been observed before, by  
Voiding no Excrements the first Days aster its Birth. It might  
indeed be .sooner known, if the Midwives, immediately after  
washing anthcleanfing the new-born Infants, did, according to  
their Duty, inspect this Part, and observe whether it is rightly  
conform'd. If this be neglected, the Physician often comes too  
late, as *Retonhuysien, Obs.cru.* 5. *Part.* I. well remarks.

The Quality and Degree of this Defect Vary according to  
the different Thickness of the Tegument that closes up the  
*Anus.* Generally some Sign or other; as a Prominence or Pit,  
ι shews the Place where Nature designed a Perforation ; bnt  
.sometimes no such Mark can be perceived 7 sometimes only a  
thin Membrane comes over the Part 4. some times solid Flesh,  
either thicker or thinner, obstructs the Passage of the Excre-  
ments. Whatever may be the Cause of the Disorder, 'tis certain,  
. that if theafrtus henot speedily perforated, and aWay laid open,  
it cannot he avoided , but thet the Excrements, call'd *Meconium,*bring retained beyond their due Time, the Child τγίΠ be seized  
with dreadful Gripes os the Belly, Vomiting, Jaundice, Con-  
vulsions, Epilepsy, and at last; Vomiting up the Excrements,  
and so perish in a miserable manner. Is only a Membrane, or '  
thin Piece of Flesh, stops up the natural Passage, the Pisce where  
the Aperture is to be made, will be marked by a sort os Cicatrix,  
or shewn by the Protrusion os thet Membrane, or Flesh, by.  
. the Excrement os the Child. - in this Case the Cure is easily  
performed: On the contrary, it is with great Difficulty, and not  
without Danger, that the *Anus* is perforated, when a pretty  
thick. Piece os Flesh shuts up the Rectum in such a manner,  
that neither Pit nor Prominence can be perceived. In the last  
Place, as I have more than once myself observed, either the  
whole Intestinum Rectum, quite up to the Colon, or highest

- Part os the Os Sacrum, is closed up, or is wholly wanting,  
- and the Intestines end about the lowed Part of the Loins, or  
Top of the Os Sacrum, in such a Case, we are to lay aside  
- all Thoughts os a Cure. *Roonhuyfen* relates an Instance, where  
- the Rectum terminated in the Bladder.

Is the Nature of the Defect be such as to admit the Hopes  
of a Cure, all we have to do is to make a convenient Aperture  
in the *Anus,* or Extremity of the Rectum. That this Opera-  
tion may he sucesssul, observe the following Directions : First  
osall, the Child is to be said, or held in a Lap by an Assistant,  
in such a manner, that the Surgeon may have a clear View of  
the *Anus,* and have it in his Power to treat it as he pleases.  
Then with a Lancet, or a two-edged Incision-knife, a little  
bigger than a Lancet, he is to make an Incssion through the  
Membrane, or thin Flesh, into the Rectum, almost in the  
same manner as in opening Abscesses. That the Operation is  
effectually performed, will he shewn by the efflux of the Me-  
conium, or black Foeces, winch must he suffered to nin till they  
stop of themselves.. This done, he is next to thrust his Finger,  
rubbed with Oil, through the new-made Aperture into the  
Rectum, and nicely feel whether the Passage be wide enough  
for tile Excrements. Is he finds it is too narrow, it will be  
necessary to lengthen the Incssion either upwards or downwards,  
or both ways, as he shall see most convenient; or to inlarge the  
. Aperture by making a new Incision crosswise, by which means  
the *Anus* will be the better disposed to assume its annular Fi-  
gure. After this, the Surgeon is still to wait till the Child dis-  
charges wherever Foeces may he yet left hehind ; which being  
evacuated as much aS shall be thought necessary, he is to thrust a  
pretty large Tent anointed with Oil, or some Vuinerary Oint-  
ment, and ty'd with a strong Thread, or small Cord, into the  
fresh Wound, that there may not be a new Coalition of the  
*Anus,* the Thread hanging out, that if the Tent should happen  
to flip inwards, it may serve to draw it back, as often as the  
Child shall evacuate by Stool: Afterwards it will be convenient  
to use a new Tent, winch after some Days should be rubbed  
. over with some drying Ointment, such as that of Ceruss, till  
the Lips of the Wound are dried up, and there is no Danger of  
a new Coalition of the *Anus. Hildanus,* about the End os the  
Cure, instead of a Tent put up a leaden Pine, anointed with  
Ointment of Coruss. But that the Tent, or Pipe,-may not easi-  
ly sail out, a fit Bolster is to he applied to the Wound, and  
firmly fasten'd upon it by the Bandage. lastly, is, perhaps the  
next Day, or the Day after, it be perceived, that the Aperture,  
which was made the first Day, is yet too small, nothing ought  
to hinder the Surgeon from dilating it, as much as may be con-  
venient. .

What we have often recommended in other Operations,  
which is, thatall things pertaining to the Dressing of a Wound,  
should be provided hefore it is inflicted, is not so necessary in the  
. present Case, and sometimes is pernicious ; because Delays in  
this Circumstance are often dangerous, especially when the  
Child has lived some Days in this Condition. For as the mise-  
rable State os the Infant often requires the most expeditious  
Opening of the closed *Anus,* let us forthwith make the Incision,  
and the Things, necessary for Dressing, may be oonVenientiy  
enough provided while the Foeces flow out of the Aperture. ’

Is a thick Membrane, or Piece os Flesh, intercept the natu.  
Ial Passage os the Excrements, it will he more difficult to save  
the Lise of the Child. But it seems better, tho' perhaps in Vain,  
to attempt the Operation, while any Hope remains, than to  
abandon the miserable Infant to certain Death, without the  
least Help. Under this Circumstance our Method of Cure must  
proceed in the following manner: First, let the Surgeon try,  
with the Help of his Finger, to discover some Mark of the *in-  
testinum Rectum,* as a Cavity or Pastage; then the Place, under  
which they are perceived, is to he marked with Ink, and an  
Incision made therein of the Length of a Finger's Breadth. If  
no Foeces issue from the Wound, the subjacent Pastage of the  
*Rectum* is to he anew investigated by pressing with the Finger;  
and, as soon as it is discovered, the *Anus* is to be perforated,  
either with one Stroke, or by Degrees, to the Very open Passage  
.. os the intestine: But this must be done with Discretion, and  
the Instrument must not he carried with its Edge towards the  
Pubes and Vesica, but towards the *Os Sacrum*; for, otherwise,  
there is Danger of hurting the Bladder in Boys, or the *Fagina,*or both, in Giris. The *Anus* being perforated, the Patient is  
to be treated as before directed.

If there be no Sign at all of an Opening in the *Intestinum  
Rectum,* then either that Part is solid, or, as I myself have seen,  
is wholly wanting; and this consequently renders the Cure  
extremely difficult, if not desperate. However, even in so  
deplorable a Case, it is not sit to leave the Insane destitute of all  
Assistance, lest we should seem to chuse rather to wait for a most  
certain Death, than to attempt a doubtful Cure ς wherefore,  
fixing on a Pisce, which seems the safest and most convenient  
for the Purpose, we enter it with a triangular perforating Instru-  
ment, *(Nab.* 45. *Fig. u.l* or a narrow Incision-knife, winch  
we plunge so far in the *Anus,* till some Perforation os an Inte-  
stine discovers itself by the Coming out of the Foeces. *Secular\**

*dus* has an Example to this Purpose, where he was obliged to  
- thntst in a Knife to the Depth of three Fingers Breadth, by  
winch he saved the Child's Lise, *Observat. 3.* The Aperture,  
thus made, is to he inlarged with the Knife, upward or down-  
ward, aS much as shall he thought fit; and the Foeces, as was

. hefore directed, heing evacuated. Care is to he taken, that *if*there should happen a more than ordinary Profusion of Blood,  
from the cutting of so many Vefleis, a proper Remedy may  
he applied. For this Purpose it seems necessary to thrust into  
the Wound a Tent that is big enough, and fitted wish a small  
Cord, and rubb'd over with a proper Medicine to stop the  
Blood ; aster this we are to follow the Directions before given.  
At the End os twelve, or four-and-twenty Hours, it will be  
proper to take out the Tent, if it has not fallen out of itself,  
and, immediately after evacuating the Foeces, to supply its Place  
with another; which at first, for some Days, must he rubb'd  
over with a digestive Ointment, and afterwards with one which  
is drying, till the Conglutination he perfected : But if the inte-  
stine cannot be opened, even by so deep an incision, the Child  
can by no means he preserved; but, after long and Violent star-  
coraceous Vomitings, will die in Convulsions.

RooNHUYSEN, in the Appendix to his Observations, *Part* 2.  
*Obs.* I. relates an Instance of a Female Child, four Months old,  
who had a Perforation in the *Anus,* but so small and streight,  
that the Mother was always obliged, with a great deal of Pains,  
to extract the Foeces with her Hands. The *Anus* at last swell-  
ing, because, perhaps, of the frequent Compression, the Passage  
os the Foeces closed up in such a manner, that there was not  
the least Vent: Os consequence the Belly swelled, and Violent  
Pains, together with a Fever and Restlessness, arose, which threa-  
tened the Lise of the Child. He made no Delay therefore,  
but first cut the *Anas* with a Lancet, and then inlarged the  
Incision both Ways with the Sciffars ; upon which issued out a  
Vast Quantity of Excrements; the Belly soon aster fell, and the  
rest of tho Symptoms remitted, and the Wound was healed by  
the Method before prescribed. So *Scultetus,* in his *Armamenta-  
rium Chirurgicum, Obs.* 7I. gives ns an Example of an *Anus,*that was not sufficiently perforated. In some Girls, who have  
naturally a closed *Anus,* the Foeces make their Way from the  
*Rectum* to the *Fagina.* This Misfortune Very seldom finds a  
Remedy ; but the miserable Patients, if they survive, are afflict-  
ed with the same during Life. *Heister-, Institut. Chirurg.*

Mr. *Jufsieu,* according to the History of the Royal Academy  
of Sciences, for I7I9. mentions a Girl of seven Years old,  
whose Anus was imperforate, and who discharged the Excre-  
ments by the Vulva. ' - -

*: How to cure a Falling down of the* **ANUS,** *or the Orifice of the  
Uterus.*

If the *Anus* itself, or the Orifice of the Uterus, which some-  
times happens, falls down, we are to consider, whether the  
prolapsed Part he clean, or encompass'd with a mucous Humour;  
if clean; the Patient is to sit in Water, either salt, or what has  
had Vervain, or Rind of Pomgranates boiled in it; if it he  
humid, it must he washed with austere Wine, or anointed with  
burnt Lees of Wine. When you have done either of these,  
the Part is to he replaced, and Plantain bruised, or the Leaves of  
Willows boiled in Vinegar, are to he said upon the Place ; upon  
these. Linen and Wool ; and over all must come a Bandage,  
the Legs being also bound together. *Celsius, Lib.* 6. Cap. IS.

*For the Falling dawn of the* **ANUS.**

We use, first, to foment the prolapsed *Anus* with Brine Or  
Sea-water, and oftentimes there needs no other Remedy. Some-  
times we sprinkle the Part with pounded Salt, the Patient heing  
conveniently placed for that Purpose, and wait a sufficient Time  
till the distilling Humidity comes forth. Then, after using  
Embrocations, and ashingent LtuseS, as Acacia or Hypocistis,  
in Wine, we put back the prolapsed Part into its Place.' The  
next Day we prepare an Insession, or ashingent Infusion, such  
as a Decoction of Myrtle, or OliVe-leaVes, or Bark of Pom-  
granate, in harsh black Wine. But, for Children, we must avoid  
Astringents, and use milder Remedies: If the Case be urgent,  
we apply astringent Cataplasms, of Dates, Quinces, and the  
like, to the Loins, and also to the *Anus.* The Diet must he  
of good Juice, as Milk-meats, Rice-milk, and the like; and '  
the Patient must drink Milk. Remedies for this Disorder are  
as follow:

Boil a Gall, and, reducing it to Powder, sprinkle therewith  
the *Anus:* If you want astrong Remedy, boil it in Wine;  
if a more gentie one, hell it in Water., Or,

Take of Bark of Pine-tree, eight Drains twenty Grains;  
Pilis of Cypress, Plumbage, each two Drams five Grains ;  
first wash them with sour astringent Wine, then pulverize  
them, and sprinkle therewith the Part affected. Os,

. Take of the Recrement of Lead, eight Drams twenty Grains;  
.Frankincense, two Drams five Grains; wash and pulve-  
rize them.

Take of Balaustines, one Dram two Grains and a half; Bark  
of.Poingranate, two Drams five Grains; Seeds of Hen-  
bane, Ceruss, each eight Drams twenty Grains; Myrrh,  
two Drams five Grains ; wash and reduce them to Pow-  
der. \_ . .

. Another Remedy, which is my own, for a prolapsed Anus.

Take of .the Fruit of Herth, Galis, Acacia, CenIss, Juice of  
. Hypocistis, Bark of Pine-tree, Myrrh, Frankincense,  
each a like Quantity ; pulverize them, and sprinkle the  
Powder, aster you have washed the *Anus* with austere  
. Wine. .

Take burnt Lentils, burnt Bread, Meal of the bitter Vetch,  
each a like Quantity , apply them with Vinegar and Soap.

First, wash the *Anus* with Wine; then sprinkle thereon the  
Powder of dry Pitch, or of calcined earthen Pots.

Wash the Part with the Decoction of Cypress; then sprinkle  
it with the Powder *os Album Gracum*; and make a Suffii-  
migation of dry Pitch, Bitumen, and Cypress.' Or, .

Anoint the Part with Coriander-seed and Laser in Wine ; and  
every Day apply a Cramp-fish, and it will contract.

Take of Bitumen and Galis, an equal Quantity ; dry and pul-  
- verize them, and sprinkle the Part with the Powder. This  
is a Very celebrated Remedy. *.Aetius, Tetr.* 4. *Serm.* 2.  
*Cap.y. ‘*

*Of curing the* **PROLAPSUS ANI** *by Burning,from* Leonides.

When the Disorder is grown inveterate, and next to incura-  
ble, and no Relief is to be had from Physic or Diet, recourse  
must he had to Bunting: For tho’ the rest of the Intestines are  
reckoned among the principal Parts, the outward Extremity of  
the *intestinum Rectum* is not of that Number; but may be cut  
and burnt without Danger, as Experience shews. It will be  
convenient therefore to apply an actual Cautery, in form of a  
Nucleus, (or Fibula) to the external Part of the *Anus,* at mo-  
derate Intervals of Time; winch, by raising a solid Eschar  
round the *Anus,* causes in it a Constriction capable of repressing  
the Part, and retaining it in its due Place. After the Burn-  
ing, apply Lint, moisten'd with Milk and Honey, to the Place,  
and bind it up: When the Crust is fallen off, apply Lentiis and  
Honey ; and when you have destroyed the Ulcer, use a Plainer  
Of Barley, or any other Cicatrizer proper in Affections of the  
*-Anus. Aetius, Tetr.* 4. *Serm.* 2. *Cap.* 8.

In some Persons, as well Infants as' Adults, the *Intestinum  
Pectum* (strait Gut) often sails through the Anus in a surprifing  
Manner, so as to hang out some Inches, a Hand’s-breath, or  
more. *Mor altus* has a remarkable Example of a Woman, who,  
after difficult Labour, had the *Intestinum Rectum* fallen out an  
Ell in Length: And *Saviardus* gives an Instance of another,  
who was but an Infant, in whom the same Part hung out no  
less than a Foot. This is not only a troublesome, but usually a  
very painful Disorder, especially to those whose Bufiness requires  
Labour and Travelling; and sometimes a dangerous Jnflamma-  
tion, and a Tumor, with a Gangrene or Cancer, seizes the  
prolapsed Part of the Inteshne; an Example of which kind you  
have in *Mecbrenius,* at the end of his Chirurgical Observa-  
frons.

The original Cause of this Disorder is, without Doubt, the  
Too great Laxness or Debility of the *Rectum Intestinum,* which  
is afterwards promoted by the Accession of other concomitant  
'Causes ; such as some great Vociferation, or, in Infants, Vehe-  
silent Crying; also a Tenesmus, excessive Pains of the Anus  
from the Haemorrhoids, a Dysentery, Stone in the Bladder, or  
Exulcerations of the same, difficult Child-birth, CostiVeness,  
and the like. The Disease, in the Beginning, is, for the most  
part, easy to be cured ; but the more inveterate It grows, the  
.more difficult is the Cure, especially if the Patient he infirm,  
and of an ill Habit of Body; and *if* it proceeds from an inve-  
terate Debility of the Intestine itself, there is but httie room to  
. hope for a perfect Restoration : But when a Gangrene or Can-  
cer has seined the prolapsed Part, the Surgeon can do no more  
than apply to it lenient Remedies, and Fomentations; or, if it  
may be done with Safety, that is, when only a small Part prom-  
berates, entirely cut it off.

The Surgeon who attends the Patient is to make no Delay,  
but restore the prolapsed Part of the *Anus* into its natural Situa-  
tion, without much troubling himself about inquiring into the

Caufes of the Disorder, or the Method of Dressing ; for the  
longer the Intestine hangs out, the more are the-Tumor and  
Inflammation exasperated, and the more difficult is the Cure.  
.. In order to the replacing of the Intestine into its proper  
Place, the following Method is to he observed: First of all, the  
patient is to lie fiat upon his Face, either upon a Bed or a Ta-  
ble; then the prolapsed Intestine is to he veay carefully foment-  
ed, especially where it is dry, with warm Wine, or common  
Spirit ofWine,. or Milk, or with warm Water, by means of a  
Sponge, or folded Linen, squeez'd out of some such Liquor  
warmed: Soon after let the Surgeon, with his two Fingers  
wrapp'd in fine Linen, gently put hack the Intestine into its  
Place, in the same manner as he would the Intestines in a Per-  
foration of the Abdomen. This is done without much Diffi-  
culty, if the Tumor and Inflammation are inconsiderable : But  
if the prolapsed Part of the Intestine be very much tumefied,  
we are to use, besides Phlebotomy, digestive Fomentations, till  
the Tumor he entirely repressed, and the Part in a Condition to  
he restored. However, the Operation is sometimes so difficult,  
that one Surgeon alone is not able to reduce it without calling  
in another of the same Profession to his Assistance. Where the  
Intestine, through Debility, has been long and often subject to  
a Fall-down, which to some happens as often aS they go to Stool,  
the Patients may themselves replace the Part with their Fingers,  
without the Help of a Surgeon, or at least the Surgeon may .  
easily do it for them, in this Case, the Method of Cure turns  
wholly upon corroborating, the Intestine by proper Remedies,  
that it may be enabled to preserve its right Situation, without  
Danger of a new Prolapsus. . .

To answer this End, and to keep the Intestine in its Place by  
convenient Strengthened, so as that it may fall down no more,  
greater Art and Industry are required than for the Replacing os  
it. The Means to he used for this Purpose are such as fol-  
low:

First of all, two pretty thick .Bolsters are to be provided ;  
one of which, of an oblong Form, is to be applied lengthwise  
hetween the Buttocks; the other, winch must be square, is laid  
over the former and the *Anus,* and carefully secured by a linen  
or cotton Fillet. It would be proper also, that, the Bolsters  
should not be laid on dry, but moisten'd with some warm cor-  
ToboratiVe Decoction: A Very powerful one, in this Case, is pre-  
pared of the Roots of Bistort and Tormentil, with the Bark of  
Pomgranate and .Oak, Galis, and Oaken Leaves, and other  
things of that Nature, boiled in Wine, especially red Wine.  
The prolapsed Intestine is also, on Occasion, to he fomented  
with the Decoction; that is, whenever it salis down again,  
which, to some Persons who have been long afflicted with this  
Disorder, happens, aS I said, almost as often as they go to Stool,  
or whenever they walk, or any way exert their Strength. If  
the Disorder be somewhat above the ordinary Degree, an excel-  
lent Powder, for corroborating the Intestine, may be prepared  
of Mastich, Colophony, *JupaatiEuxffi,* and Dragon’s-blood, -  
which, aster Fomentation, must he plentifully sprinkled on the  
Part that hangs out, hefore it he replaced, and secured with a  
Bandage. *Saviardus,* after replacing the Gut, thrust up a  
Tent, sprinkled over with Astringents, through the *Anus.*Strengthening Clysters are also of good Use, such as those pre-  
pared of a Decoction of corroborating, aromatic, and astringent  
Herbs in red Wine, particularly what is commonly call'd *Pon-r  
tac.* These Directions being carefully observed, the Patients,  
except the Disease be grown inveterate and desperate, are very  
Often restored.

. If the Disease will not give way to the Remedies mentioned,  
the Patient must not only he treated with Susthmigations of  
Mastich, Frankincense, Amher, black Pepper, and other pow-  
erful Drugs of that Kind, placed under a perforated Chair; but  
all hard, gross, dry Fond, and such aS binds the Belly, must he  
strictly forbidden, lest in OVer-straining, by reason of Costive-  
ness, the Intestine should he again protruded. The Fomenta-  
tions above-mentioned, with the Bandage, must he renewed  
aster every Stool. The Patient must abstain, as much aS possible,  
.from Vomiting and Sneezing, and all Violent Motion os the  
Body, and must resolve to live in a State of Rest till the Disease  
he subdued. *Dionis,* with some other Authors, telis us, that  
.the Patient may effectually guard against a new Prolapsus, by  
taking care, whenever he eases Nature, to sit on a Stool that  
has a Cleft of about two Fingers Breadth, or is perforated with  
a Hole of the Compass of a large Piece os Money ; by which  
Means he will restrain the Falling-out of the Intestine. Some,  
aster replacing it, intrude a leaden Pipe into the *Anus,* and  
endeavour, that way, to prevent a new Prolapsus: But if the  
Disorder he grown inveterate, and occasioned by a remarkable  
Debility of the Parts, all these Kinds os Remedies, and Ard-  
.sices *of* the Surgeon, are of no Use; but the Patients are to  
be treated with Bolsters and Bandage, that the Intestine may be  
constantly retained in its natural Place, unless we have a  
mind to expose them to greater Danger. *Heister, Institute  
Chirurgi*

*Of a Fistula of the* **ANUS,** *from* Leonidas.

An Ulcer ill cured, especially about the *Anus,* is often suc-  
ceeded by a Fistula. When this happens,, let the Patient be  
placed on a Couch, or some other plain Place ; and let the Sur-  
geon seat himself hefore him, somewhat on the Right r'Then  
let him take a Probe, and, introducing its Head into the Fistula,  
thrust it forwards through the Cavity. After this, let him in-  
trude the middle Finger of his Left Hand into the *Anus,* and,  
with it, taking hold of the Head of the Probe, bend it; and  
bringing both Extremities of the Fistula upon a Level, distend  
them with his Lest Hand, and so cut off all the callous Corpus-  
cles round about them, at one Stroke, -if it may be done: If  
there remains any Callosity after the Section, it must be scraped  
with the Knife. A Callus is known by its whitish Colour and  
Renitency. If there appear any Rhagades near the Place, they  
must betlistended with the Forceps, and cut off, that the Sore,  
bring made plain and smooth, may the more easily be healed.  
After the Operation the Wound must he filled with *Manna  
Thuris,* on which Lint must be laid, and a Proper Bandage must  
be made upon it, and the Cure managed like that of common  
Ulcers.

Is the Patients, out of Tenderness or Timidity, intreat us to  
cure them by Medicines, we are, first of all, to use such as are  
proper to dry and close up a Fistula, If these are ineffectual,  
we must have recourse to those which have the Virtue of cor-  
roding andoonsuming the callous Particles, and are called*' Fistuse  
lar Collyriums.* Medicines adapted to dry up a Fistula are, a  
Planter prepared of Litharge of Silver, Vinegar, and Oil, *Galents  
Emplastrum some* Cora, the Plaister called *Harmonia, Emplastrum  
ex Salicibus, ex Lolio,* and such-like. The following is a good  
Remedy for *Rhagades, Condylomas,* and in the Beginning of a  
*Fistula: .......* ς ς \*

Take of the Root of Peony, bums, four Ounces; Bitumen  
*Judaicum,* two Ounces *forty* Grains ; crude Sulphur, one  
Ounce twenty Grains ; Wax, two Ounces forty Grains ;

- Oil of Myrtle, a sufficient Quantity. Or, 5

Burn Quinces - to Ashes, and strew them upon the Orifice of  
the Fistula; then apply Lint, and upon that a Plaister of  
Wine or Oil, or sortie such thing, andthind it up: Dress  
it once in two Days.' \*

\* Troches for a Fistula of the *Anus* are thus prepared  
\* . ' η ἰ . . . : \* . δ

.. Take Chalcitis burnt, eight Drams twenty'Grains ; Copper  
- . thurnt, Cadmia, earth of *Crete,* each four Drams ten  
Grains; Pompholyx, Box-thorn, each three Drama seven  
Grains; Aloes, Saffron, each two Drams five Grains;  
Gum *Arabic,* two Ounces forty Grains: Bruise them in

‘ the Juice of Groundsel, ’ or that Species of Serapias which  
has a Root resembling three Testicles; and make them  
into Troches, which may be used dry, or with Vinegar,  
or Cerate. *. Artius, Totr. An Serrn. 0.. Cap.* II.

' Fistulas in the *Anus,* which are of the occult Kind, and .have  
no apparent Orifice, are known by a Pain, and a purulent Hu-  
midity issuing from *the Anus t They are also Very* often the  
Consequences of an' Abscessi ' The conspicuous Sort are disco-  
Vered by introducing, a Probe, or a Hog’s Bristle, which, pene-  
trating the Cavity, meets with the Fore-finger, supposed to be  
introduced into the *Anus,* the Fistula being perforated towards  
the internal Parts ; but in Fistulas not internally perforated, the  
Instrument and Finger are hindered' from'mutual Contact, by  
the imperforated Medium. Fistulas are known to rum oblique-  
ly, and .winding like a Labyrinth, when the Instrument meets  
with Resistance, and can penetrate but a little Way; and yet a  
more than proportionable Quantity os Sanies is discharged.  
Fistulas seated near .the Intestine are known by the corning off  
sometimes of Worms and Fceces through the Orifice. They  
have all; or most of them,, their Orifice surrounded with a Cal-  
lus, *' Ά* Fistula which has perforated the Neck of the Bladder,  
or is: seated by the Joint os the Thigh, or has proceeded to the  
*Rectum, is* incurable. Those which have no Orifice, are oc-  
cult, end' upon a Bone, or spread into Branches, are difficult of  
Cure but all the rest are easily cured.

The Operation for a Fistula is performed in the following  
manner: The Patient is laid upon his Back, with his Legs  
raised aloft,; and his Thighs bent towards his Belly, in the same  
Posture as when he is to take a Clyster; and if the Fistula ter-  
minate in the Superficies, with the Knife or Probe introduced  
through the Orifice, we cut the incumbent Skin with a plain  
Incision. If the Fistula terminate deep within *tspae Anus,* with  
one Hand we introduce a Probe through the Orifice; and, if  
the Fistula be perforated, we lay held of the Head of the Probe  
with the Fore-finger of the other Hand, and, bending it, bring  
..it forth thro' the Anus, and cut thro' the Substance, betwixt the

two Sides of the Prohe, with a plain Section, If the Fistula he  
not yet perforated, but has deeply penetrated into the Anus, and  
the Heed of the Probe is hinder'd from meeting with the Fin-  
ger, only by the Interposition of some squamous and mem-  
branaceous Body; we violently perforate it with the Head of the  
Prohe, which we bring out through the *Anus,* and cut the inter-  
mediate Substance as before : Or, we first perforate the Bottom  
of the Sinus, in the *Anus,* with a Falx (δρεπάπί) made on pur-  
pose for cutting of Fistulas, and, transmitting it through **the**the *Anus,* .cut through all the intermediate Parts with the Edge  
of the Falxthen taking held of the circumjacent Substances,  
which are all callous, with a Forceps, we cut them off, taking  
care to avoid hurting the Sphincter: For some, in making **a**deep Incision, after an unskilful manner, have wounded that  
Part; whence the Patient has heen molested with involuntary  
Excretions of the Fceces. If any, through Fear, refuse the  
Operation, we must heve recourse to *Hippo craters* Line, and  
make use os a Ligature of Thread. For *Hippocrates* orders us  
to take a double-headed Needle, perforated, and threaded with  
a five-fold Thread of raw Flax, and pass it through the Fistu-  
la ; then tying the Ends os the Tbread'in a Knot, to streighten  
It, every Day, till the Thread has cut through all.the interme-  
diate Substances hetween the two Orifices, and sells off. Is **the**Parts are flow in separating, the Thread may be sprinkled with  
dry Sand, and so drawn through the Place. Some put a Thread  
through a Hook, made hollow like a Pipe, and pass it as above  
related S But these are Methods which I can by no means ap-  
prove ; for while they avoid the Operation, and refuse to be  
cut, besides other InconVeniencies, they greatly prolong the  
Cure. ...

AS for occult Fistulas, *Leonides* says, " When the Fistula,  
which has perforated the Sphincter, lies deep, whether it  
" began from *the Anus,* or, after making a great Progress; has  
" seated itself in that Muscle, the Part being first searched  
" aS before, the *Anus* is to be dilated with an Instrument called  
" a *Speculum,* in the same manner as the *Sinus Muliebris is*" dilated ; and when you can discern the Orifice of the Fistula,  
" the Head of the Probe is to be introduced, and carried to the  
" Bottom of the Fistula; and the whole Fistula, thus disco-  
" verso, must he laid open with .the Knife or Instrument 'ap-  
U pointed for cutting of Fistalas." But we,; for our Parts,  
when we happen'd to meet with an Instance of this Kind; could  
not perform this Piece of Surgery; because we could have no  
Sight of the Place where the Fistula resided, winch was on the  
Right, between the *Anus* and the Sphincter.- But after we had  
dilated the *Anus* with our Fingers, a Fissure appeared, which  
was seated near a Wrinkle of the *Anus,* and seemed to he a Vent-  
hole for the Fistula; for. it discharged Pus. - Through the Fis.  
fure we introduced the Head of the Prohe, as -the ready Way to  
the Fistula; then intruding the Fore-finger os the Right Hand  
within the Sphincter, and finding but a thin Substance hetween  
the Finger and the Instrument, we pushed the Probe, with some  
Force, towards the Finger, and so perforated the Bottom of the  
Fistula; and, with the Finger, brought out the Head of the  
Probe through the *Anus:* This done,'with an Incision-knife we  
divided the whole Substance between the two Orifices of the  
Fistula, that is, between the Fissure where we enter it, and the  
Perforation we had made; and so freed our Probe. *P. AEgineta,  
Lib. 6. Cap.* 78. ' - . ... ..

Ulcers which infest the *Anus,* and the Parts about the *Rectum,*while recent, and discharging a laudable Pus, are called Ass.  
fceffes of *ASa Anus,* but when grown inveterate or callous, and  
continually running with a thin foetid Sanies, which is sometimes  
more, .sometimes less copious, they have been by Physicians,  
from the most early Times, called *Fistulas* of the *Anus,* and  
distinguished into Various Species, according to the Condition of  
the Distemper: 'For some of them are small and recent, or at  
least not so inveterate; some penetrate deep, het are Of narrow  
Extent; others, on the contrary, are grown inveterate, and so  
severe, deep, and extensive, as to render the".RAf?uznuonspicu-  
ous, and quite bare of Skin and Fat. Some Very bad Instances  
of this kind I rememher to have observed. Sometimes a *Fistu-*la, while -recent, is without any remarkable Callus ; -hut most  
of them are observed to have a Hardness, or Callus, of a thinner  
or thicker Substance, especially about the Orifice. Sometimes  
a *Fistula* takes but one strait Course; sometimes it makes its  
Progress by a Multiplicity of Ways, that turn and wind about.  
For the more convenient and distinct Consideration of them,  
we shall, in Imitation of the most noted Surgeons, make a *three-*sold Division of these Fistulas. '. -

The first Sort, are those which, from one or two conspicuous  
Orifices near the *Anus,* discharge, as we said, a thin and foetid  
Matter, and almost constantly appear herd, the *Intestinum  
Raectum,* and *Sphincter* of the *Anus,* not being yet perforated,  
but remaining intire. How deep, and towards whet Parts, they  
penetrate, is best discovered by introducing a Prohe into the  
Sinus, and the Fore-finger of the other Hand, first rubb'd with  
Oil, into the *Anus:* For, if there be no Perforation, the Instru-  
ment and Finger will he prevented from Coming together by **the**sound

sound and nnperforated Intestine', whose Thinness or Thick-  
ness may, at the same time, be discovered. But when we are  
determin'd to prohe these *Fistulas,* the Finger is first to be intro-  
duced into the *Anus i* for otherwise the Intestine is in Danger of  
heing easily perforated by the Prohe, and in an improper Place.  
Sometimes these Sinuses wind and turn in so intricate a Manner,  
that 'tis impossible with the Probe, how skilfully soever directed,  
throughly to investigate the Condition of the inner and smaller  
Sinuosities; the' we may perceive, by the daily copious Dis-  
charges of Sanies or Pus, when the Cavities are many or great.  
Wherefore it seems necessary, for the better Examination into  
this *Fistula,* to syringe it with warm Milk, taking Notice hew  
much enters, by which you estimate the Capacity os the Cavi-  
ties ; and observe whether any of the Milk returns by way of the  
*Anus:* If none comes back by this Passage, we judge the In-  
testine to he unperforated, as, on .the other hand, , the .con-  
trary appears, when ' the. Milk is return'd by *flic Anus,* or the  
introduced Finger serfs the naked Probe. . . Wei are taught,,  
however, by Experience, that tho'the Intestine be not pene-.  
traced quite through; its external Coats may be Very thin and  
corroded, and'loosen'd or disjoined from one another-by inter-  
mediate Sinuses, in which Case we can never warrant a Cure  
without cutting the Intestine. ‘ ' *'.'su " i.sta*

Another Species of Fistulas is known by an Efflux of Sanies  
from two or more Orifices, one ;or more of winch open into. the'.  
Rectum, and the rest are outwardly conspicuous near the *Anus sc.*Such a *Fistula* is in some measure represented *Tabs Tfi.Pig. I..*CC. The same is inore manifest, if the Head os the Probe  
introduced with one Hand into the *Fistula* meets with the base  
Finger of the other Hand intruded into the *Anus',* or if a Cly-i  
ster. Milk, or any other Liquor, injected into the Anus, is  
return'd by the external Orifice of the *Fistula* Tor, as it some-  
times happens, when the Excrements, Wind, or Worms, are;  
voided the same way. - .’ : ---ἐν- . - -  
i The third and *hit* Species comprehends thofe *Fistulas* whose  
Orifice opens into the Rectum; the external Parts contiguous to  
the *Anus* remaining sound ; represented *Tab.* 56. *Fig.* I. F G.  
These are usually called secret; blind, or imperfect ; the-sor-’  
Iner, manifest and perfect *Fistulas.* The blind, or secret, are.  
known by an Efflux of corrupt Matter every Day from *ffist Anus,*especially if no Ulcer affects the external Parts, or if the Patient"  
complains of a Hardness or painful Tumor near the *Anusu*Sometimes the internal Orifice of the Fistula is found to be Very  
deeply situated in the Intestine, but, for the most part, it-her  
conspicuous near the Sphincter of the Anus, or in it ,' as they  
*are* both represented *Tab.* 56. *Fig. i.*

However it be,: the affected Place ought to be Very carefully  
searched out, which may he done by cautiouflyjntitiding the  
Finger, rubbed over with Oil or Butter, into the *Anns,* and,  
withiall the Skill requisite, exploring the internal Orifice of the  
*Fistula,* or if this be not sufficient, a *Speculum Any* maybe  
used, such aS is represented *Tab.* 55. *Fig.* I5. or any other sit  
for the Purpose: ’ But sometimes this internal and troublesome:Investigation is' unnecessary, aS when the Seat or Sinus of the  
Fistula is evident enough from the external Tumor and Hardness.

c *Fistulas* which have as double 'Orifice, .one .of which opens in-'  
to the Intestine, and the other outwardly, are called *pcrfect* or  
*complete* ; the rest, which have only one Vent, *irapcrsiect*; the  
*French* call *Caemiincemplelles.* The last Species is subdivided in.. \*  
to two inferiors; for,' with respect to the Situation of the Ori-  
fine, imperfect or incomplete *Fistulas* of the *Anus* are some of  
them *externals* some *internal.* Moreover some *Fistulas* are  
called*simple,.*others *complicated* or *carnpound:*

.The first Denomination comprehends those which only pene-  
trate the softer Parts, which are the Skin, Tat, and thdnte-  
stine itself: Some of these *Fistulas* make their Progress towards .  
either Side of the Podex, some forwards, towards the Perinaium,  
Urethra, Bladder,:Or Scrotum ; others backwards,' towards, the  
Os Sacrum, or OSvCoecygis. . .7

. By the Name of\* *complicated* we understand thofe *Fistulas lsy*which the 0s Coccygis, the Os Sacrum, the. Or Ischii, or the  
Bladder, or the Urethra- in - Men, -or the Vagina in Women, .  
*as Musitsinus* observed, -are so miserably corroded, that the Pas-  
fag& of the Foeces and-Urine are become promiscuous. Some-  
times .-the -finali Sinuses of these *Fistulas* reach even into the  
Belly ; and these are the most dangerous of all. Some *Fistulas*aresmall,-and give but little Trouble, and are supported to a  
great: old'Age,X without any remarkable Inconvenience, of  
which- L know some Examples.- . Others, on the contrary, are  
not only attended with most intense Pains, as I have. Very lately  
feen, .but with a Decay of Strength and Extenuation of Body, \_  
a ismall Fever, and many other InconveniencieS. Again, I  
knew a Man who Was well while his *Fistula* was open ; but  
when .that-was consolidated, was soon after seiz'd with the  
Gout; the *Fistula* heing again opened, he recover'd his Health ;  
and thus it happen'd several times. Some *Fistulas* have an Ori-  
fice Io narrow, that.it can hardly be seen, or search'd with a  
Prohe, and only now-and-then manifesta’ itself by aTuhercle,  
in winch, after a Very curious Search, you meet with a small  
Hole, which-is the-Outlet to the *Fistula.* Others-gape with a

large Orifice; Some *Fistulas* make their- Progress Only hy one .  
simple-find plain way ; others spread themselves into many  
Branches, which, are as so many. Rivulets derived from one  
Fountain. Some again proceed further, and penetrate deeper,  
than others. Lastly,' some move direct along hy the Rectum.;  
others take their Course under .the Skin obliquely, or athwart,-  
forming a Multiplicity of‘Very crooked .Sinuses, \_ which,.are. ex-  
tremely difficult to-he -investigated, and consequently, not easy  
to be cured, i sisu' ' Τ. si. . ; ...r. . i . -.

The modern -Way of searching *ae .Vistula* of the *Anussuynuch*after the following manner.: The Patientis laid on a Table, or  
a Bed, upon his Belly,' with his Legs spread.- ThenOneosthe  
Assistants strongly distends the Buttocksssrom one another, that-  
the Operator may. the more - oonyenientsp intrude his -Finger  
rubb’d with Oil orIButter ’into *the Anus..* For in all Searches,  
that are eVer made, of *Fistulas* of thetioherir,. which are near the  
Intestine, it is, aS we said before, A necessary Caution, that the  
Prohe he not ^introduc'dinto thespiasc, hefore the Finger  
is intruded"into theestestioj -for otherwise it is to he seared, .that;  
the sound Intestine will he pierced, by. the. Prohe in an improper.  
Place, and *so* redder the Disorder ghertes, and the Cure inore  
difficult. When The Probe is- thus cautioufly introduced, the  
Buttocks are to be let .go, that, they may resume their natural  
Posture, and not by their Sides and Angles, when distorted, .hin-  
der the Progress of the'Prohe. If the Buttocks are in shewn ami  
turdl and right Posture, "and the Prohe, bring gently, introduced,.  
and -softly directed every way, .can.make no sartherProgrejs,  
there usually the *Fistula* terminates. Ἀ . i:/;.\*  
' The Original or Cause os this Disease is commonly an Exist--  
deration of the Haeinorrhoidal Veins, , or an Abscess howsoever:  
generated near\* the Intestinum Rectum, eineciaily in the Copious; '  
Fat winch surrounds it. I This kind, of Abscesses generally arises,  
either 'from A Contusion of the Podex,, a; Stroke,,a Tall, a.  
Wound, or an Inflammation of she Rectum, a Dysentery,  
difficult Childbirth, the Venereal. Dssease,-hard Riding, and a-  
thousand other Causes, which may. injure these Farts.7The  
Distemper.'is Veryfeommoh amongsuast Cavalry in an Army,;  
from their frequent, and’ hard Riding, especially in hot Wea- \_-  
ther, as is well known to those Physicinns who attend Camps j:  
arid\*!'myselfhave formerly seen a Multitude os Horsemen la-r  
bouting under'Fi/ZrfZor os ism Anus. fAnarit is notat all strange, j  
that'Ahieeffes os this Part, is neglected, ..eitherOutosModesty,;  
or for any other' Reason,.. or -open’d, too .fate, or nor carefully.  
cleansed, should degenerate into *Fnstulsiigij* For It can .scarce he i  
otherwise,’ but that, the'icorrupt Tvintter-which remains within,,-,  
must by Degrees, sir severely conode and exulcerate the; Fat and  
adjacept Intestine, .arid other heighbyuring Tarts, .and affect thesi  
*sinus,'*its Region, with Sinuses and Callosities, imshjGirn  
prising a inannes, aliat.all the Reinediut winch can be apply#’ -  
are of no Use without cuffingi An ilinshinus Proof of this we \*  
have in the Person os *Lewis* the Fourteenth, the late-Ring ,of '  
*France,* who, after he had for a long, time try'd all the Reme\*.  
dies that could'he advised by the inostableand experienced Phy-  
sicians and Surgeons in *Prance,* was forc'd At. last tothave.rer.  
course to the Knife for the Cure of his Fistula. -Thisheingthe  
true State of the Case, a prudent Surgeon, as soon asthe shall  
perceive, either by outward Inspection, or introducing his-Fin- -  
ger into the *Anus,* that his Patients, laheuring under an Inflam- -  
mation or Abscess of that Part, have also a- Collection of Pint.:  
inwardly, will think himself oblig’d to life hss Knife.1, uriurigi-:

The more seVerrfin ’Fistula is, the deeper\_it is situated, .the ι  
greater Quantity of the'Fat, of the Rectum, and especially ofo  
the Sphincter, is corruptedAnd corroded, the larger the.Sinus, .  
and the harder she Callus that furrounds-^The longer the-Dis. r  
eafe has .affected theParts/ and the weaker,; the older, -And the.*es.*worse the Habit ospthesPatient,- the .more diffictilt.'js..the.-  
Cure, insomuch as Toinetimes.. to Enderdjit impossible: and-;  
desperate..' But, what.ss principally, tp.he regarded,.the.defterV  
the Aperture; or Orifice,. osithe rFshqla in seated in- ;the.,In- -  
testine; the' greater: Is the Danger,, of. cutting ashnder. the/.  
larger Bloed-yesrelss, whedee. fatal Haemorrhages have'heen.obπαρ  
served, which Joan neither be- rdhaain'd.by Ligature,. noy thy;.  
Compression or Styptics, ThyTwant *sqf-a* .'hardenBody *to* maims  
Resistance, arid conseqdeIitly' the Tess TIopeEereut οζμ sCurerr-  
And really if the'Hn^eTInfepded.; inin’the αίμὲντ Cannot reach ;the Orifice of *the 'Postula, hecause it4. so deeply situated, \_the*

. Section .cannot he undertaken with hesety, ser-fear ojf injuring -.  
the larger Veins, and eonseduently ausiheArt osthesurgeon.br'  
of no importance Tn this sCase.. It is not strange, therefore, .  
that *Garengeot* should advise a Surgeon tn such a Case desist  
from the Operation, rather; than by inincting a terrible .Wound :  
he cutting the large veins, which are" in this Part os the Inte-- ;  
stine, to cast the Patient into the utmost Danger of his Life by  
an Haemonhage. For iny Part, I am so far from contradicting.;  
him, that I am rather os Opinion, that it in the Part os a pru-  
dent Surgeon to ..proinise frothing, but to be always dubious,:.

' whatever'Appearances there may he of Success in the Begin-  
ning. For oftentimes it happens, that after Section there ap-  
pear not only many Sinuses to the Fistula, but these so deeply..  
seated, and so much Injury is done to the adjacent Bones, to the

Plodder, Urethra, Varina, and the Womb itself», as will ren-  
der' the Cure extremely difficult, *is* not impossible. Abscesses os  
the *Anus,* that often recur, -are to be treated as true *Fistulas ;*for-they cannot be-cured without cutting the Inteshne, and  
the Sphincter os the dfiinr. In Women big with Child the Cure  
os a *Fistula* os the *Anus* is not to he undertaken, but we must  
wait till they are deliver'd, and well recover'd.:. For *Mauriceau*observes, that Abortion and Death have been the Consequences  
^os such an Operation. Ts in these *Fistulas* there be any Corro-  
sion in the Bladder, the Urethra, the Womb, or the adjacent  
Bones, the Disease in usually desperate, and admits os no Re-  
medy.. The blind or secret *Fistulas* are also commonly more  
difficult of Cure than those which discover themselves. On  
’ the other hand; if the Fistula he recent, and only external, or

is it he perfect, as *iB.-T.ab.* 56. *Ptg.* I; CC ; but the Corro-  
sion has only affected a small Part os the Intestinum Rectum,'  
or Sphincter, with a little of the Fat; if the Disease has not  
fpread itself to the adjacent Parts just named ; if it has not pener.  
trated deep ; if the Sinuses are not many, 'and their Sides are  
hut flightly hard and callous; if there .he a good Habit of  
Body,.and the Patient young, or not past the Vigour of his  
Age, the Cure is, for the most part, happily accomplish'd, but.  
yet so, that more Relief is to he expected from the Knife, than  
from Physic. The same Judgment is to he formed of secret  
and internal *Fistulas,* winch have their Orifices not far distant  
from the Extremity of the Spincter of the Anns; as in *Tab.* 56.  
*Fig.A. EG.*

*s* Small external *Fistulas* in some Bedies are endur'd for a long  
time, without any remarkable Inconvenience *i* and when Na-'  
tore is accustomed to them, .they serve instead of an Issue to.  
evacuate 'noxious Humours, and preserve the Patients from  
Distempers to which otherwise they would have been obnoxious.  
I know some who have liv'd under *Fistulas* to a Vigorous old"  
’ Age; therefore it is better oftentimes to let them alone, than-  
undertake their Cure; as it is in the Case of old Ulcers. When  
the Rectum is fo much Corroded by im Exulceration from an  
external.Fistula, or an Abscess, that, upon Examination by the  
Finger in the Anus, and the Prohe in the *Fistula,* it is found  
to be very thin, there is no Curing the Distemper, without cut-,  
ting open the intestinein that Place, together with the Sphincter,'  
tho' the Intestine he Rot perforated by the Ulcer. But when,  
the Intestine by the same Method ofTrial is found to he sullon  
stantia! and thick, the Ulcer may Often he cured without  
wounding -or perforating: the Part.' So a recent *Fistula* coin-  
hin’d with the Lues Venerea, or Owing its Rife to it, is often  
**cured by** Mercurial Remedies without, cutting, τ / ’

. Hitherto we have treated of the Nature" and Properties of  
*Fistulas.* Now as to their Cure,, .we think it not improper, in  
the first- place, to speak -of: perfects Or Complete Fistulas, add ofi  
the rest in their Order. . For-when we have proposed such :  
Ways and Means as are proper for the Cure os complete *Fisiu- -*Its, .it cannot he doubted but \_ the Method to he taken with  
other *Fistulas* will be the.more readily understood, in order to  
the Cure of-a complete *Fistulas* the following Directions are to-’  
he observed. When the Circumstances of the Patient, as well  
as of the-Distemper, are such as we before.declared were ne-  
cessary to give us Hopes-of a Cure, the first Business of the  
Physician is to prepare his Patient for the Operation. There-  
fore it will he convenient,- some Days before, to give a Purge ;  
and,- if. the Strength will permit, to take away some Blood.  
But if the Patient he weak, these things are to he omitted, .and  
Corroboratives are rather to he. used, A strict Regimen of Diet,  
and such as is most: convenient for the Condition of the Person  
affected,- heing, as *far* as is possible, all the while observed, and  
proper - Medicines being taken to Correct the Blood, and  
' render it mild. And that the Surgeon may not be incom-  
moded in the Section by the Excrements, nor the first Bandage  
he too soon taken off, it seems necessary some Hours before the  
Operation to evacuate , the Belly by a Clyster; and immediately  
before the Section, let the Patient, make Water, that the  
distended Bladder may nothe in Danger os heing injur'd. As  
to the Posture of the Patient, it must he such as besore pre-  
scrib'd, that is, he must lie on his Belly. ’ The Antienss, as  
appears from *Paulas AEgineta,* placed the Patient on his Back,  
with his Thighs spread ; but.the rnoft modern *French* Surgeons,  
as *Garengeot* informs ns, think him in the best Posture for this  
Operation, when he lies om his Side, afrer the manner os those.  
who take ClysterS in Bed, near rhe Edge of the Bed, with his  
Breech exposed, and inis Knees drawn up. But tho' the Section  
may he sometimes well enough performed in this Situation, yet  
I have known Coses where, on account of the peculiar Consti-  
antion of the *Fistula,* the. Operation succeeded best in the for- ς  
mer-Posture. -

The Patient being placed, as shall her thought most conve-  
niens, the next thing is to perform the Section with some fit  
Instrument, of which there are many invented for this Purpose.  
In antient Times they used a peculiar fort of Knife,, almost .  
like-a Hook, in the Cure of' these Diseases. This'they called .  
by a *Greek* Term *Syringotomus, from* Syrinx, a *Fistula.* Some  
ossthe- most common Kinds of these are represented *Tab.* 56.

*Fig.* 47 5; 6, 7. where the Letters A B represent the sharp or  
cutting Part; B C, the obtuse and smooth Part, or Style, which  
ought to he flexible; and D D, the obtuse and convex Back.  
Tho' these Instruments are rejected by some as useless, I have,  
leanr'd by Experience, that what is necessary to he done in  
these Cases, may Very often, especially when the *Fistulas* are  
of no great Depth, he most commodioufly perform'd by them.  
They are to be taken, greater or less, according to the Depth  
of the *Fistula,* and are used in the sollowing manner : Intro-  
duee the Head C of your Syringotomus into the external  
*Fistula,* and with the Fore-finger of the other Hand, first  
anointed with Oil, and then intruded into the Rectum, direct  
it thro' the internal Orifice of the Sinus, and along the Inte-  
stine, till it appears out at the *Anus.* Then taking hold of both  
Ends, whatsoever is between the two Orifices of the *Fistula*must he cut, in which Section the Sphincter of the *Anus, in*Persons otherwise found, is always cut with Safety. Many  
have imagin'd, with *Alhucasis,* and others of the AntientS, that  
a Section of the Sphincter of the *Anus* must he followed with an  
involuntary Efflux of the Foeces, and therefore directed it to he  
avoided : But Experience has shewn, that it may he cut, not  
only once, but several times, if it he necessary, in Patients who  
are sound in other respects, without doing any Mischief. But.  
is this Disorder be consequent upon this Method os Cure, it is  
to he rather ascribed to some extraordinary Corruption and  
Destruction of the Sphincter by an Ulcer or Erosion. But  
where the internal *Fistula* lies so deep, that the Head of **the**Syringotomus, which passes through is, will, with Difficulty,  
he made to appear at the Anus, the Finger in the Anus is to be  
more busily, .but warily employ'd in bending and directing it  
tail it comes out at the Anus, when the Surgeon is to make a.  
Section as. before. But as the upper Part os the Orifice of **the***Fistula* in the Intestine is generally callous, and is not cut in?  
thus Way of Cure; and yet if it be not cut, this Part of **the-**Callus. does not coalesce with the rest; but easily gives Occasion  
to a new Disorder; the adjacent Part of the intestine is to he .  
perforated with the Head of the Syringotomus, two or three Lines  
above the Orifice of the *Fistula,* and so he cut together with it  
or, if this he not done, thensoonafter the Incision, or, iftheBlood-  
he an Obstacle, some Day after it, the callous Part must have  
an Incision made in it with theSciffare, or he quite cut off.

But it is here to he observ'd, that some Physicians are of.  
Opinion, that the falcated Instrument with a blunt Point, re-.,  
represented *Tab.* 26. *Fig.* 3. or any Other like Instrument, are,  
far inore commodious than the Syringotomus above-mentioned,,  
for cutting a *Fistula* in the Anus, because the Handle is of con-.  
IiderableAdvantage to. the Surgeon in the Operation. I am in-  
deed so sar of their Opinion, from my own Experience, and  
that Of. others, that I dare pronounce it to be most handy and:  
useful in *Fistulas* which have no great Depth; for, to lay no  
more, I have myself, on several Occasions, used this Knife  
with good Success. The *French* Surgeons, that they might  
aecornplish in the best manner possible the Core of their King's.  
*Fistula,* made use of some such Knife, but furnish'd with a  
Head Or Knob at the Point, which, however, is not necessary sa  
which, from the Person in whose Case it was us'd, acquir'd the  
Name of the *Royal B'astory.* However, I should not Care tar  
apply my own above-mentioned, or that Royal Incision-knife,  
of theirs, to all *Fistulas* indiscriminately; for they are not the.  
most convenient for those which are somewhat deeply seated.  
The celebrated *Bafsius* therefore. Professor of Surgery at *Hall,.*did Very well in giving us, in his Dissertation Of a *Fistula* of the  
*Anus,* a Description of an Incision-knife, with a Very long,  
flexible Silver-Head, of winch some make *Lae Maire,* the Head-  
furgeon Of *Strafiurg,* to be the Inventor *(see Tap.* 56. *Fig.* 8.).

Here the Break or Head C heing introduc'd into the *Fistula,*in the same manner, as before directed, and made to pass thro’  
its Sinus and the Anus, the intermediate Parts, hetween the in- ’’  
ternal and external Orifices of the *Fistula,* may sometimes  
with sar more Convenience he cut, than by the Instruments  
hefore-mention'd. For the same Purpose may we use the.  
Syringotomus, *ssisiab. nsi. Fig.* 3.) which *Garengeot* has describ'd,.'  
blit delineated only in part, and winch .is used in **the same ;**manner as the other Syringotomi, but, by means of the Strap -  
E. Ε added to it, may with more Firmness he held, and the.  
Section may.the more easily he made- But I found the Incon- i  
Venience of its enormous long Beak C D, and took Care to ..  
have another made, with a Beak no longer than what reached  
to F, by. which I perform’d the. Operation with more. Con-  
Venience. :

Some, instead of a Syringotomus and Incision-knife, intro- .  
duce a flexible Silver Prohe, VVire, or Style, into the external  
Orifice of the *Fistula,* which, aster passing through the inter-  
nal Orifice in the Intestine, they so bend and direct with the .  
Fore-finger in the *Anus,* that Part of it comes out from thence ’  
(see *T.ab. ati. Fig.* I. D D). . Then taking hold of the two ;Ends H H, of the Silver Wire, they gently draw the Flesh  
comprehended betwixt C C B E, and with an Incision-knife,  
principally a falcated one, or a convenient Pair of Sciffars, :  
divide it. This way of Operation, tin/ it he yery antient, \_

and described by *Paulus AEpineta, seems to Garertgeoi* ex-  
tremely convenient, and so much the more to he preserv'd to  
others, as it prevents a Return os the Disease. *For my* part, I  
have a great Esteem for this Very antient Method ; but what  
Argument should induce this Author to think it a more effec-  
rual way to prevent the Return of the Distemper than’ any other,  
I do not aS yet cleariy Comprehend.. : ’

Others use a flexible Prohe with a Groove (see *Tab: τι.* M,  
or *Tab.* 56. *Fig.* 2.). This is introduc'd into the external Ori-  
free of the *Fistula,* and with all possible Exactness directed to  
the Intestinum Rectum, and reflected back through the *Anus ,*after which, with a Knife, or a convenient Pain of Sciffars,  
they cut the Flesh upon the Groove. Some modem Surgeons  
prefer this way Of Operation to all the rest, in the Cure of  
those *Fistulas,* which are Very deeply seated in the Intestine ;  
hut why it should be preferable to the former, I am at a Loss  
to conceive. But in whatever Method it he perform'd, it cer-  
tainly requires a great deal of Skill and Caution, lest by cutting  
the larger Branches of the Vessels of the Rectum, as it some-  
times happens in Very deep *Fistulas,* we excite a dangerous or  
fatal Haemorrhage. To proceed, the Wound being thus in-  
flicted, the Blood must be first carefully wiped away ; which  
done, the Part must be Very curioufly search'd, and inspected  
whether there he any Sinus, or Callus, or corrupted Fibres  
remaining. For if you find any Sinus, the Probe or Finger  
.must he nicely introduc'd, and the incumbent Flesh divided  
with the Sciffars .or Knife, that the corrupted Parts may the  
.more accurately he view'd and abstarged. We are not al-  
ways allow'd to accomplish the Operation at the first Essay,  
hecause of. the Moroseness, Debility, or Pusillanimity of the  
patient. For pusillanimous or morose Patients can by no Rea-  
sons he persuaded to admit of a further Search and Section the  
first Time, as 1 know by Experience; and the Infirm, or such  
ns have lost much Blond, are sometimes unable to hear them,  
so that we must necessarily proceed to the Dressing. Whatever  
internal Remains there may be of a Callus, Or Vitiated Fibres,  
inust with the like Instrument, if it may safely he done, he  
partly cut off, partly scarisy'd, or receive frequent Incisions  
from the Knife or Sciffars. The Consequence os this will be a  
quick and plentiful Suppuration, and all unnatural Hardnesses,  
with whatever is putrid and corrupt, will with far greater Con-  
venfericy he extirpated; by catheretic and mhndisicatiVe Appli-  
cations. In the mean while, th speak my own Sentiments  
freely, the Wound is much more happily/ as well as speedily,  
mundisy'd and conglutinated, is sue corrupted and hardened  
Fat be first entirely-cut away by the Knife or Scissars.

. - When Ϊ resided at *Bremen,* where! had Patients under Curd  
for the Stone, *Rungius,* a Surgeon os that Place, communi-  
fcated to me another Method of during these *Fistulas,* with  
fame peculiar Instruments,- which he had invented for that Pur-  
Pose, and which- I never sound described elsewhere. He  
makes use os three Instruments, the first of which is a. peculiar  
Sort of Probe with a Groove, *(Tab.* 56. *Fig.* 9.J represented  
In a Side View, by the Letters (A KJ and made either of Iron  
or Silver, with a Handle, (C D) which at (E) is hent out-  
wards' in such a manner, .that the Probe and Handle there  
form an obtuse Angle. The Groove Os the Prohe is shewn in ‘  
a direct View *fFig.* IOtJt Another Instrument is aCanal, about-  
a Finger's Breadth m Diameter, made also either of Iron or  
Silver, *(Fig.* II. A;-B) with a dike Handle, and forming with  
it an obtuse Angle at (B), but bent a contrary way to the other,  
-as there shewni - The Groove of this is represented in a  
direct View at *(Fig.* I2.J. The'third1 Instrument is a strait  
Knife, long, narrow, and sharp *(Fig. 13.).* When we have  
Occasion to use these Instruments, suppose there he a *Fistula* in  
the Lest Side of *tffiE Anus, as in (Fig.* I . C C), the Instrument,  
or Pipe, *(Figi* II. AB) first dipped in warm Water, and then  
anointed with Oil, is gently introduced into the Intestinum  
Rectum, and iheHandle (D) held sum and steady by an Assist-  
ant. The Surgeon takes the grooved Probe *(Fig. so)* dipped  
arid anointed like the other, and introduces it through the ex-  
ternal Orifice ofrthe *Fistula,,* and carries it the whole Length  
of the .same to; its external Orifice (C C) in an oblique Di-  
rectioh; fo that the Point (A) salis upon the Hollow, or Bot-  
tom of the Pipe;/*Figs* ITT and these firmly fixes itself, as may  
be known partly by the Touch, partly by Hearing,' and partly  
by introducing the Finger into the *Anus.* These things being  
rightly managed,- the Surgeon take the Handle os the Prohe in  
his Left Hand,-find with the Knife *(Fig.* I3.J cuts upon the  
Groove of the Prohe through the *Fistula* (C C) as far as the  
Pipe- *(Fig.* I I .J, by which means he lays open the *Vistula* from  
rhe interior Part-of the intestine, to the exterior, or *Anus.* The  
*Fistula* being out after this manner, as' to its MUndification,  
Pressings, and whatever, else is to be done in order to cure it ;  
the same general Method is to he purfued, as is spedfy'd helow.  
Tins Method seems to he suited to *Fistulas* of considerable  
Depth, because the Top of a Syringotomus, or a flexible Prohe,  
cannot without great Difficulty, and Laceration os the In-  
testine, and sometimes, in the deeper Sort of *Fistulas,* not at

all, be inflected so as to return by the *Anus.* But the greatest  
Care is to 'he taken, that the Knife doos not go out of  
the Canal, hecause the Rectum and the adjacent Parts might  
receive considerable injury thereby; to avoid which, the Canal  
*(fig. st.)* is made so large. If the *Fiflula* were in the Right  
Side of the Anus, the Instruments must have been applied in a  
contrary way, as Reason itself directs. There have been, I  
confess, others in former Times, who in cutting these *Fistulas*have introduced a strait Tuhe into the *Anus,* and afterwards, by  
means of a strait or hooked Knife, have opened the Sinus; and  
I remember, that *Ravius* in his Chirurgical Demonstrations  
recommends this Method of Cure. But those Instruments of  
*Rungius,* by their inflected Shape, render it easier for the Suri.  
geon to direct his Knife, and consequently to avoid cutting  
any thing besides the Sinus of the *Fistula*; wherefore I am of  
Opinion, that they deserve to be preferred to any thing of that  
Kind known before. .

If the *Fistula,* or Abscess, he only external, and recent,  
and seated hetwixt the Fat and Skin, the Intestine and Sphincter  
of the *Anus* being no ways affected, the Cure is to he managed  
as follows: First of all, the *Fistula,* if it he not large enough,  
but, as it often happens. Very narrow, is to be gradually in-  
larged by a prepared Sponge, a Piece of Gentian-root, or any  
other thing that is subject to swell. Aster this, it is to he  
cleansed by corroding Medicines, and then conglutinated by  
the general Method of treating *Fistulas.* Sometimes it is hetter  
to use the Knife immediately, and, as *Paulus AEgineta* advised,  
th) divide the incumhent Skin by a simple Section, or to do the  
same when the *Fistula* cannot he sufficiently dilated by swel-  
ling Tents, and to inlarge the Incision, till the Place be “laid  
open as it ought, and the .Callus at the same time removed.  
After this, the *Fistula,* at the first Dressing, is to he stuffed  
with Lint, that it may he dilated ; and is more Sinuses of the  
*Fistula* offer themselves to View at the first Dressing, that they  
may he cut. Is any thing of a Callus, or of hardened or cor-  
rupted Parts, be found in the succeeding Dressings, it is to be  
all cut away with the Knife, or the Scissars, or to he gradually  
eaten off with Corrosives, particularly red precipitate Mer-  
cury. *Mormicrius* asserts *Ointment~.of the Apostles* to be the  
most effectual and convenient Remedy in this Case. The Viti-  
ated Parts bring thus extirpated, a digestive Ointment, mixed  
with Oil os Eggs, is to be apply’d to the Place, and a Very  
accurate Bandage to he made upon it. In short, if no more  
secret Sinuses are to he discovered, if .the Sanies thickens to a  
Pus,, if new, shin, and found Flesh increases, if the thin Mat-  
ter decreases, and begins to alter its' Colour and Smell for a  
hetter, there seems nothing wantingIo make a perfect Cure,  
besides dressing the Part every Day with a Vulnerary Balsam,  
Lime-water, Spirit of Wine, or dry Lint. Sometimes, as I  
said before, and as I have seen it, instead os an Aperture to an  
external *Fistula,* a small Tubercle shews itself, which, if nar-  
rowly examined, will he found to have a Very small Perforation,  
which serves for an Outlet to the Sinus, and is more or less  
difficult to be discovered. \* in this Case, hefore all things I out  
Off theTuhercle with the Seiffars, by which means the Duct  
or Sinus of the *Fistula* is soon discovered, in order to its inlarge-  
ing, cutting, and curing, as before specify'd.

Is the external *Postula* has penetrated so deep aS to affect the  
Sphincter of *the Anus,* or the Rectum, or, at least, has so much  
corroded the adjacent Parts, as to leavethe Rectum Very chin,  
we can scarce hope to make a perfect Core, without perforating  
andcuttingtheIntestineandSphincter, aSwe before ad vi sed i This  
Operation is performed in the heft manner, by placing' the Pa-  
tient in the most convenient Posture; and then, aster the  
Finger is inserted into the *Anus,* introducing ^ Syringotomus,  
especially one furnished with a Head, *(See Tab.* 56. *Fig. S.)*or a Needle, *(Fig.* 2 J Or a Stylus, or a Prohe, not too blunt,  
through the external Orifice os the Fistula to the Bottom os it,  
towards the Intestinum Rectum, and perforating it where the  
Fore-finger meets with the Head os the Prohe; but-the Instru-  
ment inust he so warily directed, as not to hurt any. other Part  
of the Intestine, much less the Bladders The Intestine bring  
perforated, the thing to be done is, to direct and hend the in-’  
traduced Instrument in so skilful a manner, that it rnay come  
out through the *Anus,* and so this imperfect *Fistula* may be cud  
according to the Rules before Prescribed sori the cutting of per-  
sect *Fistulas,* whereby it becomes itself a perfect *Fistula.* When  
the *Fistula* lies nearthe Anus, but the Sinus under the Skirt  
has not its Course so much towards the Rectum, as towards  
the Peninaeum, or one Side of *ffi&Anus,* the most convenient  
way seenss to he, to cut it quite open with the Knife,' or Seise  
fats, and to mundify and heal the Wound, as hefore directed.  
In the last Place it is to be remarked, that, in cutting these  
*Fistulas,* especially if they lie deeper than ordinary, and the  
-Operation cannotinornmodioufly he performed by the Instru-  
mentS mentioned, the Canal *(Tab.* 56. *Fig.* II.) or one like it,  
may be Introduced into the *Anus* after the manner above de-  
scribed, and the whole Sinus laid open by means of the Knife  
E^.x3.r

Internal, secret, or blind Fistulas, usually make a - third  
species of this Diseafe. In thesti, since they appear not out-  
wardly, but lie covered and concealed, the Method of Cure  
must certainly he difficult, without the Help of a Knife, in  
making a Wound or Perforation, that may lay open the hidden  
Sinuses. The most proper Place sor the Incssion is whet is  
distinguished by some Tumor, Hardness, Pain, or Redness,  
especially if the Finger by Compression feels a subjacent Sinus,  
with a Collection of corrupt Matter, as in Abfceffes. These  
things being well examined, and the Patient placed in a right  
Posture, as above, and firmly held by the Assistants, either an  
Incision is to be made in the Tumor perceived by the Fingers  
at the Side of the *Anus,* till we come to the Sinus; or, if we  
would act more cautiously, the affectsd Part with the Tumor  
within contained is, by Help of the Finger introduced into  
the *Anus,* to be forcibly thrust outwards ; and then with a large  
Lancet, or a Knife sit *for* the Purpose, to he perforated as shall  
be thought necessary. For by this - means a blind and irnper-  
fedt *Fistula* is changed into a perseft or complete one, and so  
the Cure is rendered more commodious. The Wound thus made  
is afterwards to he inlarged with the Knife, either upon the  
Finger, or a grooved Prohe; and, when large enough, is to be  
stuffed with Lint, on which must he laid Bolsters, and the  
Whole must he secured with a proper Bandage for the first  
time. When the Bandage is taken off, the Wound, if there  
be Occasion, is still more inlarged ; and aster a skilful Investiga-  
tion of every Sinus, and the corrupted Parts within, the Intestine  
is alfo cut asunder, and the fame Method of Cute pursued, as is  
above prefcrihed for complete *Fistulas.*

If there are none of the before-mentioned Signs, or, at least,  
such as are thought insufficient, but the introduced Finger,  
with or without the Assistance of a Speculum Ani, *(Tab.* 35.  
/ry. tS ) perceives a *Fistula* in the Intestinum Rectirm, the  
Cure may he thus conducts!: First of all, let a pretty big  
Silver Wire, or flexible Silver Style, *(Tab.* 56. *Fig.* 14.) bent  
lone or two Inches, be intruded into the *Anus,* by a Finger  
of the Left Hand, in such a'manner, that the hentPart (A)  
may by Degrees be introduced into the inwardly seated *Fistula  
I Fig.* I. G) sound, if need be, by Help of the Speculum Ann  
This done, let theRrght stand, take hold of the Wire, or Style,  
by the other Extremity (B), and pull it, till the Head (A)  
manifests itfelf to the Sight or Touch, by a Tubercle excited  
near the *Anus* at the Letter (F). Then the Siver Wise is held  
with the Hand near the Extremity (Β), and the Part of the  
Skin near the *Anus,* which was somewhat raised by drawing  
the Head (A) of the Wire, is dexteroufly cut with a Knife,  
till that Head appears in the Wound. Moreover, saying hold  
of the Part (Α) now appearing out of the *Fistula,* mis Wise  
is to he more bent, as at (D *D, Fig.* I.), that by it the inter-  
jacent Parts may be drawh- outwards, and cut asunder. But  
perhaps it would not be amiss, in thefe Sorts of blind *Fistulas,*which do not lie deep, hut near the *Anus,* instead of this Silver  
Style, or Wire, hesore described, to make use of some kind  
or other of Synngotomus, *(Tab.* 56. *Figi* 3, 4, 5, 6, 7.) that  
is well hent for the Discovery and cutting of them.

' But in whatever manner the Incision is made, and cleansed  
of all Hardnesses and Impurities, the following things are to  
be done in order to a perfeft Cure : First, the whole Wound  
is to he silled up, as exactiy as possible, with Lint, and twisted  
Rags, that the Sinus of the *Fistula* may he the more com-  
inedioufly inlarged and deterged. If the Haemorrhage be ex-  
cessive, let the Lint which is at first apply’d, contain some  
Powder, or Liquor, proper to stop the Flux. So when the  
*Fistula* lies deeper than ordinary, let the twisted Rags, which  
are pressed down to the Bottom of the Sinus, he always tied  
with some strong Tliread, or small Cord, lest, in renewing the  
Bandage, any of the Lint should he left within. Let triple Bol-  
sters be laid upon Plenty of Lint, the first or undermost nar-  
row, but long and thick , the second a little broader ; and the  
third, or uppermost, almost square, as in the sassing down of  
the *Anus.* Every thing lying in just Order and Smoothness,  
a T Bandage, made of Lined or Cotton, is to come over all  
and bind them together with due Firmness and Neatness. Then  
let the Patient he put to Bed; add if there be a Redandance

Of Blond, or there was but little lost during the Operation, let '  
him he blooded in the Arm, for fear of an Inflammationi *Be*trot too forward in talcing off the first Dressings till the second  
or third Day, unless some Necessity 'Of going to Stool requires  
it; but when there is only a Desire, as is very often the Cafe, it  
is hetter to abstain a while than immediately to unloose the  
Bandage. But whenever the Patient seek himself under a real  
Necessity, it is convenient to take off the Bandage, as well  
sor the more commodious exonerating the Belly, as to preserve  
the Bandage clean from the Faeces; and if any of these in  
going to Stool should happen to gut into the *Fistula,* they must  
be very carefully wiped away, either with a Sponge moistened  
with warm Wine, or with dry Linen Rags. That the Lips of  
the Wound may not too soon come together, but may always  
be kept duly open, let the Wound he often west stuffed with  
fresh Lint. It any thing of a Callus, or any herd or -corrupted

Particles, should he sound loft-in **the** succeeding Dressings, the  
Ulcer is first to he well searched to the Bottom, and then the  
Lint is to he spread with a digestive Ointment, mixed with a  
little red Precipitate, or AEgyptiacum; and this is to he done  
every Day, till you sind the vitiated Parts are quite extirpated  
from the red and found Flesh. But observe, that for the first  
fourteen Days after the Operation, the utmost Caution is to ,  
he used, that no Sinus of the *Fistula* be left unstarched., nor  
must we, without good Reasons, forbear to use our Instru:.  
ments in the Abscission, or laying open of those infectsd Parts,  
which the Moroseness or Weakness of the Patient prevented  
us from doing in the first Operation. That a Sinus or two of  
the *Fistula* have not been throughly searched and opened, may  
he known partly by the Sight, pardv by introducing the Prohe,  
but principally by the Plenty of the Matter issuing from thence,  
and the Colour, Smell, and Consistence of the fame remain-  
ing unaltered. For as foon as the Wound looks pretty clean,  
*and the Fistula* begins to heal, the Matter grows Jefs and lest  
in Quantity, and becomes whitish, moderately thick, and less  
foetid. In this Case, it will he proper to promote the Growth  
of Flesh by Incamativesand Balsamics, andat last, .to perseci ~  
the Agglutination with dry Lins. The Diet under all these  
Cases must be temperate, sparing, and of Fluids; nor must the  
Patient, especially in .the Beginning, he indulged the Use of ‘  
folid Fond, but only Broths, lest the frequent Desire of going  
to Stool should as often occasion the-unioosening of the Band-  
age, which would he very troublesome to the Surgeon, and **a**very great Hinderance to Conglutination. .

*Fistulas* complicated with a Caries, or with an Ulcer of the  
Bladder or Urethra, are very difficult, and generally impossible  
to he tarred, as we said hesore.- However, when the Os Ischii,  
of Os Coccygis, are assectsd with a Caries, not only the Ulceris  
to be dilated, that we may have freeAccefs to the Part,, but pro-  
per Topics are to be used to take off the Caries. T have found  
the Essence of Round Birthwort most effectijal for this Purpose.  
Nor must we neglast the Use of internal Mercurial Remedies,  
and . Decoctions of the Woods, to purge and free the Blond  
from the Scurvy and Lues Venerea, which are often joined with  
this Disease, till the soul Orifice he cleansed, and the Bottom -  
again covered with found Flesh, and the Ulcer at last congluti-  
na ted by the same Remedies as simple Ulcers arctreated withi

*Fistulas* complicated with an Ulcer of the Bladder or Urethra,  
are still worse than the others, and seldom admit of a Cure ,  
yet if the external Ulcer he diligently cleansed, and. plied with  
Balsamics, in Conjunction with the Use of the internal Medi-  
cines above-mentioned, the Defects in thefe Parts, if not quite  
defperate, if the Patient he healthy and robust in other respects,  
are now-afid-then restored.

I am not ignorant, that there is a Multiplicity of Methods  
for curing a *Fijluia* of the *Anus,* proposed by the Antients, as  
*Hippocrates, Celfus, Paulus Algineta, Albucasts, hie.* such as  
by Ligature, het Irons, and Corrosives, which I have on pur-  
pose omitted, becaufe they are so far from heing preferable to  
what I have mentioned, that upon Comparison they will he  
found not fo convenient and proper. One thing however I  
must not pass over in Sllence, which is, that when the Sphinoler  
of the *Anus* is corroded, destroyed, or debilitated by some ad- -  
jacent *Fistula,* the Patient, for the most part, labours under a  
Difficulty of retaining of the Faxes. . But in Persons of a  
strong Constitution, and where the Spbinctir is not considera-  
bly corroded, it may he cut asunder twice or thrice, or even  
oftener, if there be Occasion, witheutmuch Inconvenience,  
or Danger of the hefore-mentioned Infirmity. Sometimes the  
Age of the Patient, Imbecllllty, the Severity of the Distemper,  
especially when the *Fistula As very* deeply seated, prevent, the  
Operation from being undertaken. We-must then endeavour  
to mitigate the Disease and the Pain by cleansing Injections,  
and Applications of lenient and balsamic Medicines. In short,  
the more to be pitied the Condition is of those whe are forced  
to undergo the Operation for a severe *Fistula,* the more ridicu-  
lous is . the Folly, of *saleusyFrenchmen,* who, theugb they sele  
nothing of a *Fistula* in the *Anus,* yet, that they might have the  
Reputation of going through rhe same Disease, andWayof.Cure,  
with their King *Lewis* the XIVth, glorying in Misfortunes,  
and making an Ostentation of Mifery, were earnest with .the  
Surgeons to have the Operation of cutting for .the *Fistula* per-  
sormed upon 'them, as wo are informed by *Dienis,* a very, sial-  
fol *French* Surgeon, who, at the fame time, verygravcly cen.-  
sores this most absurd Passion in his Countrymen..~ ... ...

Since the right Management of a bad*Vistula* of **the.rfquiis**one of the most dissicultWorks belonging ^ a Surgeon, it will  
certainly be worth our while to propose -some Cautions, that  
are of singular Use for the rectifying and betioryrerforming-the  
Operation. **εἴ 5. ῖ , \* - i**

First then a severe *Fistula* ought to be cut in such a‘ manner,  
that the external Wound may be always wider then the Bottom  
of the Sinus of the *Fistula*,. for .by so doing, this as west as  
other *Fistulas* are more throughly oleaofed,. and easier to he  
healed. For this Purpose st may e\-en sometimes he necessary  
to make two lncisions across’the affectsd Part, and then with

the Knife, or Sciflars, to cut out whatever you find hard, or  
corrupted, especially at the Bottom of the *Fistula*; for except  
this be done, the *Fistula* cannot he well cured, and easily re-  
turns. This may sometimes he more conveniently and safely  
performed, by taking up the Vitiated Parts with a Hooka Or  
Foreeps, and so cutting them off.

2. To avoid injuring the Intestine in dilating the *Fistula* with  
the Knife, it ought to he directed with its Edge, not towards  
the Intestine, but outwardly towards the Os Ischii.

3. If the external Orifice of the *Fistula* he ryot situated near  
the *Anus,* but in the Middle Of the Buttocks, so that the Sinus  
is next to the Skin, and proceeds by Degrees towards the  
Rectum, a grooved Probe is to be introduced into she Bottom  
Os the Fistula, upon which the incumbent Skin is to be dexter-  
oufly cut with the Knife, or Sciflars.' Then theWound is to he  
well stuffed and dilated with Ijint, and the next Day the Nature  
os the *Fistula* is to be throughly examined ; the rest of the Pro-  
ceedings are to he regulated according to the Directions given  
before.

4. If the Intestine be exulcerated and perforated, as it com-  
monly is in complete *Fistulas,* the Style or Head os the Probe,  
or Syringotomus, is to be thrust into the Intestine rather two  
Lines above, than through the internal' Orifice os the *Fistula,*that the hard and callous Parts within it may the more commo-  
diouflybecut out. But when the Instrument pailes through  
the internal Orifice of the *Fistula,* it will he necessary, after  
cutting through the Intestine and Sphincter, to cut off with the  
Sciflars the hardened Part of the Intestine, that is next above  
the *Fistula,* to the Breadth of two Lines, or of a Straw.

: 5. If at the .same time you should .happen to perfo-  
rate a Vessel, which discharges Plenty of Blood, your best  
way is to pass under it a crooked Needle and Thread, and so to  
xie up its Extremity. But if this cannot he effected, set a Bol-  
ster, squeezed out of some styptic Liquor, he applied to the  
divided Vein, and closely compressed with the Pinger for half  
an Hour,, till a Crust be induced ; then filling up the Wound  
with Lint hard twisted, lay upon them some pretty thick Bol-  
sters, and secure the Whole with a firm Bandage; let the Pa-  
rient also observe to keep himself at Rest, and let an Attendant  
he ordered strongly to compress the Bandage with his Hand for  
some time, because sometimes it has been observed, that when  
ihe bleeding Vein has not been sufficiently compressed, the Blood  
has not flowed out through the Bandage and the *Anus,* but  
taken its Course into the Intestines, and killed the Patient.

6. When the Bandage is made, if the Patient some Hours  
after seels a Pain in making Urine, he must be exhorted to bear  
it with Patience, -shtce it usually goes off in a short time.

- ‘ 7. If the *Fistula of* the *Artus* be complicated with the Lues  
Veneres, there is no easy nor safe Management Os the *Fistulas*without first curing the other Distemper; but when this is ex-  
tirpated, the *Fistula* often heals without Section.

8. *Arnaldus* invented and recommended a particular Bandage  
.for *a Fistula os* the *Anus,* which *Garengeot* has carefully de-  
scribed, and given the Preference to it hefore all others, by  
many Degrees. *See a Description of it under the lfrord***FASCIA. .... . . ....**

'. 9. Lastly, when the Wound heglris to heal by Degrees,  
*Garengeot* advises us to intrude into the *Anus Z Tent* of Lint  
of a Finger's Bigness, and covered with Pompholyx, for the  
better drying of the Wound as it heals. .But this is often un-  
Decenary; for I commonly find dry Lint, when the Ulcer is  
.well cleansed, and filled with. Flesh, sufficient for this Put-  
pose. *Heister, P.O.. Sect. ζ. Cap. ism. ... -*

It must he remark'd, that the Cure of a Fistula in the Anus  
is not always to be attempted; for in Bodim of a Very bad Ha-  
hit, an entire Interception of the habitual Discharge made by  
the Fistula would he attended with very ill Consequences, and  
Precipitate the Patient into a Consumption, or some other Dis-  
temper more fatal than the original Disorder, of which I have  
feen Instances. This is the general Doctrine; bur I can form  
Ito Idea of any Humoins .so inveterately riveted in the Consti-  
tution, but that a proper Regimen, and Medicines judiciously  
apply’d, together with other.succedaneous Evacuations, may so  
her subdue, as to render, the healing up aFishdnd in the *Anas*indue time, curable, without any Prejudice. - I

***Of an* ABSCESS *of the* ANUS.**

Since the Original of *it .Fistula* of the *.Anus* seems, for  
the most part, to be an Abscess, near the *AJtus,*, when we come  
' to know the Nature and Way Of treating this Ahscess, we .shall  
clearly comprehend the Properties of this Sort of Fistulas, with  
the Method how to preserve ourselves, from them, and to cure  
them. Therefore we .cannot but think ic worth while to he-  
stow some Remarks upon an Abscess of the Anus.

The Beginning of this Abscess is twofold; for it either attache  
the Patient on a sudden,' or comes on him slowly and insensibly.  
-The former is like a Boil in the Beginning, but soon after in-  
creases Very fast, and in a Very short time.excites a Variety of  
violent Symptoms, and especially Pains,

At first a sort of sharp Tuhercle, scarce so big as a Pean; *ex*Haste-nut, with a remarkable Hardness, appears. About this  
Hardness, winch uses to lie deep near the *Anus, a Redness is*commonly perceived. Sometimes the outward Skin has the  
Marks of an Erysipelas, or Ignis Sacer, while it is red without  
a Tuhercle, but with so severe an Inflammation, that, unless  
it be speedily digested; in littie more than sour.and-twenty  
Hours, -it turns to an Ahscess, and is often attended with such  
excessive Pains, aS to induce a Fever with Thirst, want of  
Sleep, Nausea, extreme Weakness, and other bad Symptoms.

The other Kind of Abscess, which is os flow Progress, is by  
Pome denominated a *Fistula* from the Very Beginning, and is  
known, aS other Abscesses, by the Pain and Tumor, but tends  
more stowly to Suppuration.

But in whatever manner the Abscess is generated, certain it  
is, that the corrupt Matter, aster Suppuration, prepares itself by  
Degrees a Way to he discharged, and at last either personates  
the Skin near the *Anus,* or the Intestine. Before this can be'  
effected, the adjacent Fat is more or less corroded, and con-  
verted into Sanies, by the pent up acrimonious Matter, whence  
are formed a Variety of Sinuses, sometimes single, small, and  
direct, at other times large, crooked, and deep; and at last,  
penetrating through the external Skin, or intestine, fooner or  
later, according to the different Nature or Quality of the Mat-  
ter collected within ; so that it is no Wonder, that *Fistulas* ge-  
Derated of Abscesses are forne of them more severe than others.  
- For the Cure of an Abscess of this Kind, in. the Beginning,  
Digestives, in the Form of a Fomentation, or Cataplasm, may  
he apply'd ; .but because the Disease is seldom cured by such  
means, and more Dependence is to he had on manual Operation  
than Medicines, recourse is to .he had, in Season, to the  
Knife, and the following Method is to he observed: First, the  
Patient is to be placed in the same Position aS we directed sor  
-the Operation under a *Fistula os* the Anus; then let the Sur-  
geon, by pressing with his Finger near the *Anus,* or introducing  
it into it. Very carefully search the vitiated Part, and throughly  
explore the Bottom of the Sinus of the corrupt Matter,  
though no outward Sign of a Suppuration as yet appears; but  
if only a HardnesS or Tumor be perceived, the Matter Is to  
the brought to some Degree of Ripeness, before the Instrument  
is used. - .

As in every Abscess Suppuration is to he .promoted and  
accelerated by the Application of some emollient Cataplasm,  
.such aS that prepared os Crums of Bread with Milk and Saffron,  
or by a Plaister of Diachylum with the Gums ; so a Very neces-  
sary Caution is to be observed, which is, that the Cataplasm,  
*for Plaister,* be not lest too long upon the affected Part, which  
may cause the Suppuration to proceed farther than it ought  
into the inward Parts, by which means the circumjacent Bodies  
bring wasted and consumed, the Disease may be rendered despe-1rate, .or at least more exasperated and dangerous. Therefore  
we ought not to wait till the contained Matter shews some  
external Sign of Maturation; but the Cataplasm is to he re-  
moved after,every two or three Hours, and, the Skin being  
wiped, we are to examine with a Finger os each Hand, one  
introduced into the *Anus,* and the other press'd on the external  
Parts, whether. by Compression hetween the Fingers any  
.corrupt or mature Matter can .he discover'd. No Credit  
therefore is to he given to thofe who determine, that it is only  
proper to open an Abscess, when the malignant Matter is plain-  
Jy perceived\* to the perfectly maturated; sor in such a State it  
would destroy the adjacent Parts.

AS soon as there is any Sign of a Collection of corrupted  
Matter within the .Tubercle, by means of the Finger intro-  
duced into the *Anus,* is to be pushed outwards towards the Skin,  
on the Side of the *Anus.* Then with the Incision-knife, or  
..Lancet, let an Incision be shade through the Middle of the  
Tubercle quite to the Receptacle of the Matter, and, raising a  
little the Instrument, let the Sanies, which is commonly mix'd  
with Pined, run into a Vessel placed underneath, and let the  
. external Parts be gently pressed on all Sides, in order to force  
out the remanding Matter. . . :

The Matter heing evacuated in a Quantity sufficient to de-  
monstrate, shat the Abscess is perforated, let the Knife, or  
Larreet, he drawn out in such a manner as to cut the tumid  
Parts above the Abscess in a strait Dine, and so make the  
. Wound a little larger. This done, thrust in a Finger to the  
r Bottom, in order to distend theWound, and explore its Cavity,  
. or Sinus ; then above or near she Finger, cautiously introduce  
: the Knife, or Scissius, and, carrying it near *gicaeAnus* lengthwise,  
dilate the Wound to a sufficient Largeness; and, lastly, that  
there may be the freer Access to the Root of the Evil, the  
i Part affected, if necessary, must have transverse Incisions made  
.: in it, and whatever shall he sound within preternaturally cor-  
rupted ond hard, must be cutout, in the same manner as direct-  
Y ed for *Fistulas. -*

. . In order to a right Treatment Of this Wound, it will be ne-  
cestary, according *.to Garengeot,* to observe the following Can-  
- I ions: First os all,' let the Wound he filled up, aS exactly as  
. possible, with .three or four large Tents os Lint, each with a

Thread or String testes to it, which must he distinguished from  
each other, either by their Places on the external Surface of the  
Wound, or by their Colour, lest, when we come to unloose and  
change the Dressings, we should happen to pull out the lower  
Tents before the superior, and so excite a pernicious Haemor-  
rhage. Over these Tents must be laid plenty of Doffiis of  
Lint, and by drawing a littie, as *Garengeot* advises, the Thread  
os the lowest Tent the Dossils, are united in dose Conjunction ;  
then placing several narrow Bolsters in such Order, that the  
upper Bolster may he always wider than the next under it, oyer  
all must be brought a proper Bandage, such as is described  
for a Fistula under the Article FASCIA. But, to speak my  
Mind freely, I do not see the Necessity of such a Multitude of  
Tents with thein.Strings in a simple Abscess, nor of so trouA  
blesorne and operose a Dressing. For my part, I take care to  
have this sort of Abscesses, as well as others, well filled up with  
plenty of twisted Lint; and then applying Bolsters, make the  
Bandage in the most simple manner with the common Fillet.  
In the following Dressings I do not pull out the Lint, by Force,  
but apply to the Ulcer a digestive Ointment, and a Plainer of  
Diachylum, and wait till a Suppuration coming on, they sall  
off of themselves; and by this Method there is no great Danger  
of an Haemorrhage. After this, I deterge the Abscess, as I  
do other Abscesses, and at last heal it with Balsamics.

If any considerable Vein happens to be cut in the Operation,  
it feems necessary either to tie the Vein, or, if this cannot he  
done, to apply a small Bolster squeezed out of some styptic  
Liquor, and to compress the same with the Fingers for a while  
till the Blood is stopped. The Wound afterwards is to be more  
filled with twisted Lint, more and thicker Bolsters are to he  
laid on, and an Assistant is to be appointed to attend the Pa-  
tient, that with his Hand he may compress that Part of the  
Bandage winch is just over the bleeding Vessel. As for Conglu-  
tination of the Wound, though *Garengeot* has said nothing  
about it, I perform it exactly by .the same Methods as in other  
Abscesses, and *Fistulas* of the *Anus.* Oftentimes these Abscesses  
are maintain'd by a Venereal Cause, and Funguses and Calluses  
arise in them, so that they cannot he healed.

To conclude, it seems strange, that *Garengeot,* who, like  
us, divided *Fistulas* of the *Anus* into *perfect* and *imperfect,* and  
gave the Characteristics of each, should yet, in treating of the  
Cure, pass over in Silence the blind and imperfect *Fistulas,*though these require a fmgular, and, I may fay, a more artificial  
Management than the others, as, I think, appears in the pre-  
ceding Chapter. Neither has *Garengeot* said a Word about the  
Method of treating complicated *Fistulas* of the *Anus,* though  
they are not so scarce and rare to be sound, aS to deserve to be  
palled over in Silence. *Heister, P.* 2. *Sect. 5; Cap.* I69.

*Mr.* Sharp's *Observations on the* **FISTULA** *in setsQ are as  
follows:*

If the Surgeon has the first Management of the Abscess, and  
there appears an external Inflammation upon one Side *os* the  
Buttock only, after having waited sor the proper Maturity,  
let him with a Knife make an Incision the whole Length *of it,*and, in all Probability, even though the Bladder he affected,  
the Largeness of the Wound, and the proper Application of  
Dossils lightly pressed in, will prevent the Putrefaction of the  
Intestine, and make the Cavity fill up like ImposthumationS-of  
other Parts.

If the Sinus is continued to the other Buttock almost sur-  
rounding the Intestine, the whole Course of it. must be dilated  
in like manner, since, in filch spongy Cavities, a Generation of  
Flesh cannot be procured but by large Openings ; whence also  
*if* the Skin is Very thin, lying loose and flabby over the Sinus,  
it is absolutely necessary to cut it quite away, or the Patient will  
. he apt to sink under the Discharge, which, in the Circumstance  
here described, is sometimes excessive. By this Method, which  
cannot be too much recommended, it is amazing hew happy  
the Event is likely to be; whereas from neglecting it, and  
trusting only to a narrow Opening, is the Discharge does not  
destroy the Patient, at least the Matter, by being confined,  
corrupts the Gut, and, insinuating itself about is, forms many  
other Chanels, which, running in Various Directions, often  
baffle an Operator, and have been the Cause of a Fistula heing  
so generally esteemed very difficult os Cure.

Here I have considered the Imposthurnation as possessing a  
great Part of the Buttock ; but it more frequently happens,  
that the Matter points with a small Extent os Inflammation on  
the Skin, and the Direction of rhe Sinus is even with the Gut :  
In this Case, having made a Puncture, you may with a Probe  
learn if it has penetrated into the Intestine by pasting your Finger  
up it, and feeling the Probe introduced through the Wound  
into its Cavity, though, for the most part, it may he: known  
- by a Discharge of Matter from the *Anas.* When this is the  
State of the Fistula, there is no Hesitation to he made, but  
immediately putting one Blade of the Scistars up the Gut, and  
the other up the Wound, ship the whole Length of it.

- This Process is aS adViseable, when the Intestine is not per-  
forated, if the Sinus is narrow, and runs upon, or very near

It; sor if the Abscess he tented, which is the only way os'  
dressing is, while the external Orifice is small, as I have here  
supposed, it wist almost certainly grow callous; so that the  
surest Means of Cure will he opening the Gut; that proper Apo  
plications may he laid to the Bottom of the Wound. How-  
ever it should he well attended to, that some Sinuses pretty  
near the intestine neither run into, nor upon it; in which  
Case they must be opened, according to the Course of their  
Penetration. There are abundance of Instances where the  
Intestine is so much ulcerated as to give free Issue to the Mat-  
ter of the Abscess by the *Anus \* but, I believe, there are none  
where there is not by the Thinness and Discoloration of the  
Skin, or an induration to be perceived through the Skin, some  
Mark of its Direction, which, if discovered, may he opened  
into with a Lancet, and then it becomes the same Case as if  
the Matter had fairly pointed. \*

' -If the Sinuses into and about the Gut are not complicated  
with an Induration, and you can follow their Course, the mere  
opening with Scissius, or a Knise guided on a Director, will  
sometimes suffice ; but it is generally safer to cut the Piece of  
Flesh surrounded with these incisions quite away, and, when it  
is callous, absolutely necessary, or the Callosities must he  
wasted afterwards by escharotic Medicines, which is a tedious  
and cruel Method of Cure. -

. When the Fistula is of long standing, and we have Choice of'  
Time for opening it, a Dose of Rhubarb the Day before the  
Operation will he very convenient; as it not only will empty  
the Bowels, but also prove an Astringent *for* a while, and prevent  
the Mischief of removing the Dressings in order to go to Stool.

It sometimes happens, that the Orifices are so small, as not  
to admit the Entrance of the Sciflars, in which Case Sponge-  
tents must be employ'd for their Dilatation. . . .

In performing these Operations on the *Anus,* I do not think  
any Instrument so handy aS the Knise and Sciffars; almost all  
the others, that have been invented to facilitate the Work, are  
not only difficult to manage, but more painful to the Patient:  
Nor do I caution against Cutting the whole Length of the  
Sphincter, Experience having shewn it may be done with littie  
Danger of an Incontinence of Excrement; and, in Fact, the  
- Muscle is so short, that it must generally he done in Dilatations  
of the Intestine. ,

The worst Species of Fistula is, that coinmunicaring with  
the Bladder, where the Prostate Gland is primarily concerned.  
This generally takes its Rise from a former Gonorrhoea, and ap-  
pears externally first in the Perinaeum, and afterwards increasing  
more towards the *Anus,* bursts out in Various Orifices through  
the Skin, which soon becomes callous and rotten ; and the  
Urine, passing partly thro' these Orifices, will often excite as  
much Pain, and of the same Rind, as a Stone in the Bladder..  
\*- Having met with none of these Instances, that I could not  
trace from4 Clap, I have heen induced, in the Trial of Cure,  
Io practise Salivating, which assists Very much in healing the  
‘Wound aster the Operation. The Manner of opening, this  
Fistula is by cutting out the callous Skin and Eminences,  
-down as deep as the *Accelerator Vrina,* and somewhat deeper  
between that Muscle and the *Erector Penis,* ifthe Indurations he  
.there. The Operation is severe, but very well rewards the Pam.  
It is not to be expected however, if there are many Sinuses  
into the Bladder, that they will all certainly he healed ; but they  
will be reduced to one or two, almost all the Urine come by  
- the Urethra, and the Pain be quite removed, of winch Success  
\*1 have liad two or three remarkable Instances under my Care.  
See **HAEMORRHOIDES.**

.Case LἈονπ Le Dran.

*Of a blind internal Fistula in* **ANO.**

’ Though all *Fistulas in Ano* hegin by smaller or larger Ahs-  
: cesses, formed in the Fat covering the Rectum, yet they differ  
in Various respects. .

Authors mention blind internal *Fistulas in Ano*; but some  
have not described the proper Operation in that Case, and others  
are not fufficientiy instructive in an Affair of so great an Im-  
portance. This Observation may serve as a Rule, at least, in  
Cases nearly parallel to this.. ........

On the I 3th of *February* I 726. a Man was received into the  
Hospital, who had evacuated Matter by. the *Anus* sor the Space  
of eighteen Months, more or less, according to the Distance  
of Time between his Stools. He could not inform me how it  
began, having never felt any remarkable Pain (It is not astonish-  
ing, that a small Abscess should be formed in the Fat near  
the Rectum, without creating much Pain, the Pus being ca-  
pable of extending itself without meeting any Resistance), in  
examining the Distemper, I found an Hardness on the Lest  
Side, within an inch of the *Anus,* which seemed to be  
three Fingers Breadth deep; the Buttock appeared sound, and  
there was no Alteration in *Coticula,* or *Panniculus Adiposus.*

When I had prepared the Patient by two copious Bleedings,  
as he was robust, and purged him once, I performed the Ope-  
ration.

Having placed him with his Belly against the Side of the Bed,  
his Feet upon the Ground, his Legs and Thighs asunder, and  
there held fast by two Assistant Surgeons, I thrust an Impost-ί  
hume lancet into the Hardness which I had felt with my 4Pinger, and thus made a complete Fistula of a blind one: Then  
withdrawing the Lancet, I introduced a Probe in its Place  
with my Left Hand, and passed it as far as the Callosity; in '  
the Midst whereof was a Cavity, round winch I could move  
my Probe: Then I introduced the Index of my Right Hand  
into the *Anus,* and discovered the Sinus that passed from the  
Callosity into the Rectum. ' \* ’ -dur-

That Γ might leave no Source of a Fistula hehind, I pierced ;  
the Intestine with my Probe a littie above the *Fistula,* and, -  
drawing it out by tile *Anus,* finished the Operation in the usual  
manner, cutting off, or destroying the Callosities. - '

The Patient left the Hospital in the Beginning of *April,* per-  
fectly Cured. ...

R e M A R κοὐρ μά so'

The most preferable Method is, to pierce the Intestine above  
the callous Perforation; for'want whereof you run a Hazard.

i of leaving a Part of the Callosity, which may retard the '  
Cure, or even render the Operation ineffectual. ' “ ;

C A S E II. *from* Le Dran.

In the Month of *April 1725.* the King having done me the  
Honour to nominate me Surgeon Major of the Hospital os *La  
Charite,* I saw a Man there, upon whom the; Operation for a  
*Fistula in Ano* had been performed three Weeks hefore. The  
Wound seemed to be in good Condition, and lessened every  
Day, insomuch that the Cicatrix seemed almost formed.. Ne-  
vertheless, . examining it with Attention, L observed a littie;  
fanious Pus to proceed from a small Sinus in the Wound,  
near the Cicatrix. Startled at this, I. passed/my Probe  
into the Hole; and found a Sinus along the Intestiniim  
Rectum, four Fingers Breadth deep, whichsterminated in a.  
Cavity surrounded with Callosities, and the intestine was denu-.  
dated the whole Length of the Sinus» I began the Operation'  
again; performing it in the usual manner, by dividing the In-  
testine in -the whole Extent, where it was bare. I destroyed  
the Callosity as much as I possibly could; and to become.  
Master of the Bottom of the Wound, I made an Incision into  
the Buttock, taking off the Angles. This furnished littie Blond  
for that Instant; but an Haemorrhage succeeded six Hours after.  
I went immediately, and, removing the Dressings, placed a  
small Compress dipped in styptic Water upon the Vessel that  
furnished the Blood, which I held with my Finger near half an  
Hour, that the Styptic might produce its Effect. The Hae-  
morrhage being stopped, I supported the Compress with a  
threaded Dossil, and that by many others, and secured the  
Whole with Compresses, and a proper Bandage. I did not re-  
move the Dressing for two Days, and then the Patient, was  
dressed according to Art, and recovered in six Weeks. I was  
informed, that he bled five times in the same manner aster the  
first Operation.

REMARKS. i

There are two essential Precantions in the Cure of Fistulas.

When the Operation is performed,-all the Callosities must  
1 he effectually destroyed,’ especially those at the Bottom, be-  
cause it will he too late to consume them some Days after,  
’ upon account of the external Lips approaching.

I think I ought to make a short Remark in this Place, in sa-  
Vour Of young Students in Surgery. You must take care  
in the Dressing not to rub or irritate the Edge of the di-  
vided Intestine, In placing the first Dossil. For which  
Reason, at each Dressing, especially during the first ten. or  
I Twelve Days, you must introduce your Pinger to the In-  
testine, fixing the Edge with it; then passing the Dossil,  
with your Forceps, between your Finger and the found.But-  
- rock, till it reaches the Intestine itself, withdraw your Finger,  
and fix the. Dossil in' its Place, so that half may be in  
the Wound, and half in the Rectum. The Neglect of  
this last Precaution is enough, to prevent .the Cure, even when  
.... the Operation has heen well performed.

With regard to the Haemorrhage, which either accompanies or  
follows the Operation, many Methods are proposed Io stop  
It. I have practised all, and find none more certain, or  
less painful, than what I used to the Patient, who is the Sub-  
ject of this Observation.

**CASE** III. - .

*. \_ Os.a* **VENEREAL .FISTULA** *in Α&Ο.*

The Suppuration of Venereal Tumors is different from those  
not proceeding from the same Cause; and the Symptoms at-  
tending them are, generally, not fo active; because the Ve-  
nereal Virus is more disposed to fix, than to ferment those  
Fluids wherewith it is-confounded.

On the 27th Os *April sTiS.* a Servant Came to me to the.  
Hospital, who had a considerable Abscess on the Left Side of :  
the *Anus,* - which was pot accompanied with Symptoms in pro..  
portion to. its Magnitudes We know that large Abscesses, at *s*the Beginning, arevejy troublesome to Patients by their excessive  
Pain, Tension, and Fever; Symptoms which subsist, and even  
increase more and more; till the Pus is formed. d .

When the Patient was sent to the Hospital, the Pus was  
already formed; and the Skin like'Dough, wherein the Ini-  
pression of iny Finger remained,: and' it was with Difficulty  
that the Fluctuation was to be felt. . ἐν

I opened it,-and found the Rectum denudated *more* than  
three Fingers Breadth above the Verge of the *Anus,* I cut  
through all that Portion of the Intestine which was denudated, .  
and cut away all the Skin that was altered and separated from  
the adipous Substance. - - . .. . . .. r. .: . .

-The Wound proceeded very happily, and the laps approach-  
ed; and in all Appearance a Certain-Cure was to be expected,  
when, in fifteen or twenty Days, an hard Fungus appeared at  
the Bottom of the Wound, which fifing in the .Fotin of a  
Crown; seemed to he carcinomatous. I took it off with my  
Bistory,: but in a sew Days it pushed out again ; and then I he-  
gan to interrogate the Patient, and, by the Description he gave ',  
the os the Venereal infections he had. hefore, I knew, in to he  
the Lues. Sudorific Ptisans and AEthiops Mineral were admi- ί  
nistered in Vain ; the Fungus Visibly returned as I consumed it;,  
therefore I advised him to a Salivation. - . :

He went from the Hospital to a proper Place, where he was  
salivated; and when he Came from thence, only a small For-  
tionof the Wound remained to he cicatrized. - «

***CASE*** IV. -

*. Os. a* **FISTULOUS** *and* **VENEnEALARScEsai .**

’’ In the Month os *September Vileni.* a Patient was sent to *La  
Charite,* who had a gangrenous Abscess *in Ano,* which began,  
in the same manner aS that mentioned in the preceding Obser-  
vation. I interrogated him as to his manner of Life; but he  
was discreet, and confess'd nothing that could give me the least.  
Reason to think his Cafe Venereal; therefore, after he was pre-  
pared, according to Custom, I performed the Operation.

' In twelve Days the Lips os the Wound grew callous, and 4  
Fungus rose at the Bottom. To discover the. Truth of what  
he had concealed from me, I thought I could deceive him in.  
my Turn ; and told him, that those Symptoms were certain  
Signs of the Lues Venerea, and that he could not he cured'  
without taking proper Remedies to subdue the Cause of his  
Disease, and the Use of proper Dressings at the same time.  
He imagined that he should stay at the Hospital to pass through  
this Course, and confess'd, that he had two Chancres and a  
Gonorrhoea two Months before.- Then I told him, thet he  
could not stay in the Hospital; and by my Advice he went to  
the *Petits Maisons,* where he was salivated, and perfectly  
Cured.

’S ’ REMARKS/

Abscesses formed near the *Anus,* and that break os themfelves,  
r degenerate into Fistulas in time, and occasion Callosities:

The same thing would have happened to those two, of whom  
I have been speaking, had I not performed the Operations  
that seemed necessary.

If then old Fistulas, not Venereal, are callous, as well as those  
that are, the Surgeon ought first to examine his Patient,

- that he may take his Measures accordingly.

If it be a simple Fistula, the Operation may he performed ;  
but when you know it to he Venereal, I think it most pru-  
dent tohegin by treating the Patient for the Lues. ’Some of  
the last Kind, that were recent,.have been known-Io he  
cured with all the other Venereal Symptoms, atid-have.had  
no farther Occasion for an Operation. . ᾶνύ. : .

If by a methodical Course the Fistula does not heal; the Ope-  
' - ratinn must he afterwards performed.

I '.CASE V.

*Of a complete* **FISTULA** *in* **ANO,** *caused last an cxirdneods  
Body in the Recturn, communicated by Mr.* D'Estendau, *Suapi  
gem, at the* Hague. ' ' '

In the Month Of *Decemher.* I728. I was called to a Gentle-  
man of fifty Years, to heal him of an external *Fistula in  
Ano,* with which he had been afflicted, for eight or nine  
Months. He was emaciated, and hecome almost hectic, partly  
from the Pain he endured, and partly from a flow Fever that  
never ceased ; so that ins Life was not song expected. ;

When I had probed and carefully examined it, J judged there  
was no Tone to lose before the Operation was performed, espe-  
cially, because this *Fistula,* whose .external Orifice was two  
Inches from the *Anus* on the Right Side, could not make: fir-  
ther Progress, without rendering the Captation impracticable,  
since the Fistula already pierced the Sphincter as far as I could

reach, with my Pinger. I prepared my Patient immediately,  
and then performed the Operation, in Presence of a Doctor  
of Physic, and Professor of Anatomy at *gisae Hague.*

When I thought the Operation was finished, I thrust iny  
Finger into the Wound, to examine whether I had sufficiently  
open'd the Sinuses, and scarified the Sides of the Fistula, and  
was much surprised to feel an extraneous Body at the Bot-.  
tom of the Wound, which was hard, pointed, and wedged in  
it. . This obliged me to make an Incision, in order to difengage  
it, without which it could not he extracted ; and I then drew a  
Scale of Bone, pointed at each End like a Lancet, two Fingers-  
breadth long,, and a littie broader and thicker than the Blade of  
a Penknife. It seemed by its Hardness and Appearance to he  
the.Scale.osca Beef-bone. I inquired of the Patient, whether  
he rememhered to have swallowed that Bone, who answered in  
the Negative; but he rememhered Very well, that some time  
before the Manifestation of the *Fistula,* he felt a Tain on a sud-.  
den like, a Stab with a Dagger near the Rectum, and thought,  
he shoulihavefainted away by the Excess of it. It was at this  
Timed .without Doubt, that the Bone pierced the Intestine,,  
pricked .the neighbouring Parts, caused an Inflammation, and at  
Iast anAbscess, which degenerated into a *Fistula.*

. I theffed . the Patient, and afterwards prescribed him proper  
Medicines, by which Means he recovered the 3Oth of *January*I729..which,was the fiftieth Day after the Operation. *LeDran.*

It is proper to take Notice, with respect to the Anus, that,  
many Substances of an extraordinary Nature are discharg'd by  
thin Emissary. Thus calculous Concretions form'd in the bi-...  
liary Ducts and Cystis, sometimes pass this Way ; and we  
have an Instance in the Philosophical Transactions of a great  
Number of Stones, one of which weigh'd upwards of two  
Ounces, which, after a great deal of Pain, came away by the *Anus.*But the Tallage of the Foetus by the Anus is, of all others, so  
extraordinary a Case, that I must not omit the following Ac-  
count communicated by Mr. *Giffard* to the Royal Society.

I was sent for, about the Middle of *August* last, to a Wo-  
man, .who then Judged herself to he between three and four  
Mon ths . gone with Child: She had all the Symptoms preceding  
a Miscarriage, and, upon touching, I found the *Os Tinca*somewhat dilated and spread, from whence I concluded a Mis-  
carriage would ensue, and therefore order'd whet I thought pro-’  
per. to promote it; but I was sometime after informed by her  
Hushand, that aitho'she before helieved, that she had misearry'd,  
yet, that she now thought herself quick, as seeling somewhat  
to move within her Belly, agreeable to what she had perceived  
after former Qpickenings. Thus it pasted on for about six or  
seven Weeks ;. in which Tune she grew much bigger, and the  
Motion more perceptible ; so that there remained no Doubt of  
her being with Child. About the third os *October,* she was  
seized with Violent Pains in her Belly and Back ; which daily  
increasing, her Sister, by her Define, came to me on the sixth,  
when I went to her, and found her labouring under Very great  
Pains, and other Complaints like those preceding a Miscarriage  
or Delivery : Put, to he better satissy'd, and to strengthen my  
Opinion, I passed up two Fingers into the *Vagina,* to examine,  
hy the Touch,.’ whether the *Os Tinca* began to open and  
spread. I there felt a large and unusual Fulness and Tension,,  
which I judged to he .the Body of the *Uterus* sunk low into the  
*Viigina,* and much distending it, and extending backwards, and  
pressing against the *Rectum, so* that the Excrements could not  
readily pass,, neither Could she, froth itsTressure upon the  
Neck of the Bladder, freely make Water. I could not find  
the I Or *Tinca,* altho' I very carefully examin'd all about with  
The Ends of iny Fingers ; wherefore I then judged, that the  
*Fundus Uteri* must have receded from its natural Position, and  
he hent hackwards towards the *Rectum :* In which Opinion I  
was more strengthen'd, from the Fuiness I before observed,  
stretching- backwards ; and therefore concluded, that the Dr  
*Tinea* must he very forward : Wherefore I endeavour'd to pass  
my-Fingers hetween.the *Os Pubis,* and the Fuiness which  
pressed against the upper Edge of the said.Bones This, with  
some Difficulty, I effected, and, at length, about two or three  
Inches above the said Bohef I felt the *Os Toncae* with the Ends  
.of my Fingers. . The Cause of this Situationswill more clearly  
appear in the Pursuit of this Account : Γ order'd her anodyne  
and quieting Medicines, to’ relieve her Pains, which she was  
.obliged to take every twelve Hours, with proper Cordials to  
support Nature, and sometimes Clysters.. Thus Matters con-  
tinued to-the 2Oth of: the said Month, only that for some Days  
hesore, a Water, tinged .with Blond, came away, as she ima-  
gined, thro' the *Anus, ,* and which she believ'd proceeding from  
-the Piles, with winch she was sometimes .troubled.

On the 2Oth, her Husband came ro me, aboutSix of the  
-Clock in the Evening, telling mo that the Midwife had brought  
away a *Foetus,* but could not complete her Business ; where-  
upon I immediately.-went to the Midwife, whe, upon my  
coming, told me» that, a *Faetus* was protruded thro' she *Anus',*-and to confirm .is, desired me to examine ; which I did imme-  
diately, and found-the *Funis Umbilicalis* hanging out about two  
**.or-**three Inches beyond the *Anus,* and passing up thro' **the**

shine, ί therefore pasted my two Fore-fingers by ithe String  
into the Anus, when I found, about three Inches up, an Open-  
ing, as I then judged, into the *Utcrus,* wide enough to admit  
the Ends of three or four Fingers, and the *Funis Umbilicalis*passing into it , from hence I was assured, that the *Foetus* came  
Out that way. I endeavour'd, with my Fingers pasted into the  
Opening, to bring away the *Placenta*; but as it was very rot-  
ten; it tore away between my Fingers, *so* that I was forced to  
bring it in small Pieces, and was at last obliged to leave a large ’  
Part of it. The *Septum,* or Partition hetween the Anus and  
*Pagina,* was entirely whole, and no Perforation through it.  
From these Appearances I then concluded, that a Mortification  
must have begun in the *Uterus,* and so from its Contiguity be  
communicated to the *Rectum* ; so that Nature, endeavouring  
to expel what was contained, and forcing it against this Part  
already mortified, and consequently ready to give way and se-  
parate upon any Pressure made against it, produced this Open-:ing, and the Prolusion of the *Fartus* thro' it into the *Pactum,*and so on thro', the *Anus. ... . .*

There was a large Discharge of.grumons Blood, and other  
Substances, thro' theashus, which continued coming away until  
the 26th os the aforesaid Month, "when the Woman died aheut  
Three *of* the Clock in the Afternoon;

I should have observed, that there was a Fuiness and Hard-  
ness Very perceptible, to he felt outwardly on the Fore-part of  
the Belly, some Distance below the Navel, from the Time that  
the *Festus* came away, to her Death, which, upon opening the  
Body, I was well assured, was the *Uterus* forced upwards and  
forwards hy a *Sacculus,* winch heing large and distended, sill'd  
up the *Pelvis,* and by its Bulk, pressed the *Uterus* forwards.  
The *Foetus* was perfect in all its Parts, but much wasted and  
shrunk, from its being some time .dead, and Consequently pu-  
trified. . . . n. :. . . . r :

Upon Dissection, the Vagina, Uterus, Ligamenta Rotunda,  
Left Ovary, Fallopian Tube, and Ligamentum Latum on that  
Side, together with the Hypogastric and Spermatic Veffeis on  
the same Side, were found in a natural State. The Fallopian  
Tube on the Right Side we traced from the Fundus Uteri  
almost to the Morsos Diaboli, where it was confusedly united  
with, and opened into the Sacculus hereafter to he described».  
The Ovary on this Side, withthe Ligamentum Latum, was di-  
sated into a large Sacculus, of an irregular Form, extending  
itself behind the Uterus (to the posterior Parts of which it ad-  
her’d); and passing on towards the Left, was connected to that  
Part of the Colon that terminates in the Rectum, in this Sac-  
cuius we found great Part of the Placenta, and the Remains of  
lacerated Membranes, besides the Aperture of the Fallopian  
Tuhe mentioned before, and another aheut four Inches in Di-  
ameter into the Middle of the Rectum , that Part of theDre-  
ter on the-Right Side, which lies between the Ovary and the  
Kidneys, was dilated, and so was that Part of the Rectum  
hetween the Aperture into it, and the End of the Colon ; both  
which were caused from the Contents of these Canals heing  
obstructed-in their-Passage. *Phil. Transi.Abr.* Vol. 8.

ANUS, in Botany, signifies the posterior Opening of a Mono..  
petalous Flower. This Name was originally tis'd by Mr. *Faillant.*

ANXIETAS, Anxiety, Restlessness. See ALYsMos.

ANYADEI, an eternal Spring, the new World, the fir-  
tureParadise. *Rulcmd. .. . - .*

- ANYDRIA, άνυδρίη, from *a.* Neg. and υδωρ. Water, ί In  
*Hippocrates* it'signifies a dry Season: Thus, Ἐν καύμαιην ἀνυδρίης.  
*Lib.* 2. *Sect.* I. *Epid. An “* In burning hot-and dry Weather. '\*  
Such a Season is said to he *Anydran ; as Lib:* 2. *Epid .Sect.*

3. Τὸ ἔαρ καὶ τὸ θἐρος πάνυ ἄνυδρον\* " The Spring and Summer  
" were extremely dry; \*' and *Aphorism.* I4. *Lip.* 3. Βόρειον καὶ  
ἄνυδρον’ " Attended with Northerly Winds, and dry Season. "

ANYDRON, a Species of *Sclanum. Blancard.*

\* ANYPERBLETOS, ἀνυπέρβλητος, from a. Neg. and  
ὑπερβάλλον, to conquer, infuperable r Thus, Ἀνυπέρβλητος γή οὐ  
φύσις ὑβζ βοείων κρεῶν, καὶ οῦ τῆς τυχήσης κο/λίης καταπέψατ  
" For the Beef is of an insuperable:Nature, and not to he di-  
gested by an ordinary Stomach. " *Hippoc. de Rat.siVict.*

*in Morb. Acui.*

*l* ANYPEUTHYNA, ἀνυπεήθυνα, from a. Negative,, .end  
ὑπερεήθυνος, obnoxious. Things for which we are not account-  
able. *Diae Anppsuthyna,* in Medicine, are Events that cannot  
he charged on; the Physician, nor render him accountable  
for them. *Hippocrates,* πὸμγήελ. speaking of ignorant and  
"upstart Physicians, says, Καταχλιδουσι καταμεμεληκότες τἀ δ  
τέχνης ἀνυπεύθυνα, ἐφ'o/ς ἄν ίητμάςάγαθός άκμάζοι. ὸμστεχνος  
καλεόμὲνἰος\* " They live Voluptuoufly, never troubling them-  
" selves aheut the *Anypeuthyua* ose the Art, in winch a good  
" Physician, who deserves the Name of an Artist, shews his  
" greatest Skill? \*\* In this Place *Anypeuthyna* seems to import  
.those things winch are Out os the Limits of Reason, and can-  
not he accounted for. . . . ν

ANYSTOS, ἄνιιστος, from ἀνυανω, *to perfect.* Ready, *ose*.pert. *Hippocrates, xiei* ὲυσχημ. -requires, as a Qualification in  
Physicians, that they he ἄνιιστος πρὶς Λόγος, \*’\* of. prompt Eloe.  
" qnence. ’’ ' ‘

. AOCHLESIA, ἀσχλησία, from α. Neg. and ἰχλεω, to  
disturb. A Calmness, or Quietness.

AOCNIA, άοκνίη, from α. Neg. and οἱ-νος, flow, lazy.  
Diligence, or Alacrity. To undergo Labour with Alacrity,  
and eat without Satiety, are reckon’d by *Hippocrates, Lib. de  
'Epid. Lila* 6. *Sect. a. T.* 20. two great Preservatives of  
Health.

AONCON, ἀογκον, from α. Neg. and ογκος, a Tumor.  
Not tumid. *-Hippocrates, maji quiff.aeiVfdrru,* advises, for the  
Cure of Epidemic Diseases, Τε o σῶμα ορην οκως ἔσται ἀογκό-  
τατον καὶ ά.θενέστάτον- To take care, that the Body he very low  
\*" in Flesh, and much debilitated. ” Some understand by  
ἀσγκοτάτον σῶμα, a Body of the most stilid Constitution, and  
least exposed to the Injuries of the Air, not of a fluxile humid  
Substance, but denfe and compacti and so less liable to external  
Impressions. Not bloated.

.. AORGESIA, ἀοργησία, from *a.* Neg. and οργὴ, Anger.  
An Absence of Anger. Mildness of Temper.

AORNOS, ἄορνος, from.a, Neg, and *quits,* a Bird. Spo-  
ken of Pisces void of Birds, on account of malignant Exhala-  
tions, as formerly the Lake *Avernus in Campania. Castellus.*

AORTA, ἀορτὴ, the great Artery proceeding from the left  
Ventride of the Heart, from which all the other Arteries either  
mediately or immediately procced, and by which the whole  
Mass of Blood is convey’d to all Parts of the Body.. See  
**ARTERIA.**

\* The Aorta is fubjedl to many Disorders, some of which have  
heen taken Notioe of- under the Article ANEURYsMA ; and  
the following Cases will give forne Light into the Nature of  
others, which it is necessary to know, in order to distinguish  
them, and make a proper Prognostic, for they are always in-  
curable. - -.

MI. *Littre* having open’d the Body of a Woman who died  
suddenly in the Street, and who had, till the very Moment of  
her Death, heen .vigorous, found, besides, other things, the"  
Coats which form the Trunk of the *Aorta* ossify id in several  
Places, its interior Part fissi of Ulcers and fungous Excrescences,  
but yet without any Inflammation : The Sigmoid Valves were  
likewise become hard and callous.

- This State os the *Aorta,* besides other concurring Causes,  
may have contributed very considerably to the fudden Death of  
the Paoent ; for the Arteries are all along in their Course fur-  
nished with fleshy Fibres, which, by their Action and Spring,  
continue to the Blond that Momentum or Impulse, which it  
at first received from the Heart; for ’tis plain, that the con-  
tractile Force of the Heart, coofidering its Weakness, could  
not, without this continued Impulse, throw the Blood so far,  
and that too in Canids so winding and so small ; but ’tis in a  
particular Manner impossible, that, without this Impulse of the  
Arteries, the Contraction of the Heart should propel the Blood  
with such a Degree of Force, as to make it enter the irnper-  
' eeptible Orifices of the distant Veins. Thus the Arteries, and  
all their Ramifications, are, as it **were, so many CONTINUED  
HEARTS,** seconding and promotiog the' Action of the chief  
and principal one. Now ’tis plain, that'in this Woman"the  
Ossification and Consumption of a Part of the Substance of  
the Trunk of the Aorta, must’ have absolutely taken away its  
Spring, and consequently,deprived the Heart of that Assistance,  
without which it could' not carry on the. Circulation of the  
‘ Blond. ' ' ,

MI. *Merry* fays, that having open’d a' Man who died sud-  
denly, he-found his *Aorta so* dilated, that it had heoun to se-  
parate itselffrom the Base of the Heart, in which Case, the  
Circulation of the Blond must have necessarily bad an imme-  
diate Stop put to it. *Hist, de st Acad.* I 7 I0.

MI. *Maraud* the younger, upon opening the Body of a  
Merchant in *Paris,* who died suddenly, after having been  
for some time subjeA to Palpitations of the Heart, was not sur-  
prised-tostnd polypous Concretions formed in the Aorta, and  
in the Branches of the pulmonary Arteries and Veins; but was  
astonistfd with some other uncommon Circumstances ., for, on  
the Lest Side of the Heart, one of the two *Valvulae Mitrales* of  
the pulmonary Sack was transform’d into a kind of Cystis, the  
Bottom of which lay towards the Sack itself, and the Mouth  
towards tbeVerrtricle of the Heart. This Cystis was the Valve  
itself, dilated to such a Degree as to be able to contain one’s  
Thumb, thicken’d, and having small Bones in several Parts of  
it. The three Sigmoid Valves of the Aorta, in like manner,  
being considerably thicken’d; had each *of them, in* several Places,  
small Bones, very solid, irregularly ranged, and ‘rising like so  
many Rocks. Now ’tis easy to conceive, that, of the Blood,  
which flow’d from the pulmonary Sack to enter the Left Ven-  
tricle, some Part must remain in this Cystis, preternaturally  
form’d; and that the other Part could not, without a great deal  
of Difficulty, make its Way thro’ the *Aorta,* the Valves of  
which, being thicken’d and ossified, did nor become flat, as  
they ought to have done, in order to perform their Functions  
duly. - *Hast. de f Acad; Ac* I729; ‘

AORTRA, ἀορἰρμ. The Lobes of the Langs, suspended ain  
each Side. This Sense of the Word, if not the Word itself.

depends upon a Criticism of Foesius, on a Paflage in *Hippocrates,  
-Lib. 4. de Morias,* where he reads r \*AapJpa τε πνεὑμονος σπα-  
*Sislae* Επίν *deflect* σπαΑῆ τοῦ ποεὑμ.ούος' " If the Aortra are  
" seized with Convulsions.” Here all the Copies, says *Foe.,  
foes,* by the grossest of Blunders, read ἐνθρο, instead of ἀοῥτρμ,  
for there can he no Doubt, he says, hut this is the Place ex-  
plained by *Galen* in his *Exegesis,* as follows : Ἀοῥτρον τὸ ἀπημ  
τημένον τοῦ πνεὑμονος έκατέρωβεν. " Aortron is a Part of the  
" Lungs suspended oh each Side.”

AOVARA, *C. Biran.* Is a Fruit as Targe as a Hen’s Egg,  
which grows with many others in a Cluster, inclosed in a great  
Ped, fasten’d to a Species of very high and prickly Palm-tree,  
which grows in the *East-lndies* and in *Aprica.*

When the Pod is ripe, it bursts, and lets appear the Cluster of  
Fruit, which, being ripe, ate fleshy, and of a golden yellow  
Colour: The *Indians* eat them ; the Flesh incloses a Stone very  
hard and bony, as large as a Peach-stone, having at its Super-  
sides three Holes at the Side, and two lesser near each other.  
The Bark of the Stone is two Lines thick; it contains a fine  
white Kernel, which, being chew’d, at first hath an agreeable  
Taste; but, at the End, it becomes of a sharp Taste, which  
approaches that of fome Sorts of Cheese. They extraol from  
the Kernel a sort of Palm-oil.

The Kernel of *Aovara* is astringent, and good, to stop a  
Loofeness, being eaten. *Eemery de Drogues.*

APAGMA, άπαγμα. of ἀπὸ, from, and ἀγω, to draw.  
Abduction. See **ABDUCTIO. ...**

APALLA GE, ἀπαλλαγὴ, from ἀπαλλἀώω, to change. Any  
Alteration in general; but, in *Hippocrates,* it sometimes striol-  
ly signifies such a Change as is caused by a Deliverance from a  
Disease: As, for Instance, *Aph.* 45. *Lib.* 2. Των έπιληατικω,  
τοἰσι νέοισι ἀπαλλαγὴ,, the. ποιἐνη.- " Young Persons are freed  
" from an Epilepsy, *etc”*

APANCHO MENOI, ἀπαγχὄμενει, strangled. TheWoed  
is used by *'Hippocrates, Aph.* 43. *Lib. 2.* and is derived from  
ἄγχω, to strangle.

APANTESlS, ἀπάντεονς. from ἀπαντάμ to meet. Α Meet-  
ing. The Word occurs in *Hippo erasu, muri* ,έυχημ. and is one  
of the Qualifications he requires in a Physician. It is taken in  
different Senses: *Foesius* joins it with .the preceding Word  
ίσυχί», and would have them to mean Assability, and Easiness  
of Address; others, by ἀπάντησες, understand Reprehension, and  
a Severity in censuring and reproving the Faults of others; and  
some mink *Hippocrates* intends by it that Qualification which  
puts a Physician upon his Guard against Errors, and upon  
teaching every Person about the Patient the Duties of these  
Place, and whet ought to be done, or omitted, from time to  
time. ...

APANTHISMUS, ἀπαιῆςδμὸς. a very fine, and scarce per-  
ceptible Line, properly in Painting; to which *Galen, de Van.  
et Arter. Cap.* 8. resembles the smell Ramifications of rhe Veins,  
no bigger then Hairs, or the Threads of a Spider’s Web, which  
are called *Capillary Veins.*

APANTHROPIAI, -ἀπανθρωπίαι, from ἀπὸ, from, and  
ἄνθρωπος, a Man. An Aversion to Company, and Love of  
Solitude. We find the Word in *Hippocr. Coaca Pra.*

APANTICRY, ἀπαντικρὑ. Openly, manifestly. *Hippo,  
crates de Artie. ' \_ - ' . .*

APARACHYTUM VINUM, ἀπαράχὑτος οτνος, Wine  
not mixed with Sea-water. *Galen de Comp. Med. Sec. Gen. et  
iMeth. Med.. Hcswx Athalaysas,* ἀόάλαα,^'. (from «Negative,  
and βάλαιυα, the Sea) is the same aS *Aparachytus.*

APARAQUA, *Hirnand.* seems to be a Species of Briony  
growing in *Brasel. Raii Hist. Plant.*

APARASCEUASIA, ἀπαρασκευασίη, from a’Ndgative, and  
παρασν.ενάξω. to prepare. Unpreparedness ;' as when theTsiings  
necessary for Bathing are unprovided. *Hippocr, de Ratione Vict.  
in More. acut. . . .*

APAREGORETOS, ἀπαῥηγονητος, from a Negative, and  
παοηγορέώ. to comfort, mitigate. What affords no Comfort or  
Relief. *Hippocr, ruri casgrtc.*

APARINE, Offic. Ger. 963'. Emao. I I26. Raii‘Hiss *i.*4S4. Synoni g. 225. J. Β. 3. 7Ig. Dill. Cat. Gissi 67. Hist.  
Oxon. 3. 33I. Phyt. Brie 9. Merc. Bot. I. 2o. MeI. Pin. 9.  
*Aparine vulgaris,* C. B. Pin. S33. Park. Theai. 567. Boerh.  
Ihd. A. I5o. Tourn. Inst. ti4. Elem. Bot. 03. Rupp. Flor.  
Jen. 4. Biiab. 23. CLEAVERS, or GOOSE-tarRASS.  
*Dale.*

*Aparine,* otherwise called *Arnpelocarpus, Qtnphalpedrplas, Phi-  
lanthropus,* and *Tuus,* has many siender, square, rou gh Branches.  
The Leaves Ire" roainil the Stalks’ in Circles, at Intervals like  
thofe of Madder. The Flowers , are white, the Seed hand,  
white, round, and sunk in the Middle, in form of a Navel;  
The Herb sticks to Cloaibs; and the'Shepherds use' it instead  
of a Skimmer, to take off Hairs from Milk.

The expressed Juice of the Seed, Leaves, and ssfalks,' drank  
in Wine, cures the Bites of the Phalangium [a venomous Sort  
of Spider] and Viper; and, instill’d into the Ears, eases the  
Pains thereof. The Herb, beaten up with Hog’s Fat, [ οξὑγ-  
γιον, rendemi, by *Harm. BarVarus,* Leea of Vinegar J

and the Parts' anointed therewith, discusses strumous Swell-  
ings. *Diofcorides, Lib.* 3. Cap. I04.

*Pliny* adds, that the Leaves, applied, stop the Elceding of  
Wounds. *Nat. Hiest. Lib. ay. Cap.* 5.

Aparine is moderately drying and detersive, and is of sine  
Parts. *Oribast -*

This is an annual Plant, arising yearly from Seed, having  
many weak square Branches, not able to support them-  
lselves, having at every Joint eight or ten long narrow Leaves,  
set round about the Stalks like a Star; From among these grow  
out smaller Branches, with the like Leaves growing on them .  
and on the Tops of these come forth several Mowers, small and  
white, of one Leaf, divided into four Parts, each of which is  
succeeded by two globular rough Seeds, growing close together r  
The Root is small and fibrous. The whole Plant is rough, and  
almost prickly, sticking to the Cleaths.of any that come in its  
Way.

This Herb goes by a great many different Names, but is most,  
commonly known by *Aparine, Asparine,* or *Gratterona.* It  
Sows almost every-where in the Fields, especially about the  
oots of Bushes, and Hedges. It has many rough littleTwigs,  
which bear Leaves, and a whitish Flower, upon which the Seeds  
grow in Pairs. It is an Enemy to most other Heths that grow  
near it, and either lays fast hold of them with its rough Leaves  
and Twigs, or extirpates them entirely. ' Upon the *Alps* the  
Shepherds use it, in order to cleanse the Milk os any Filth that  
may have fallen into it. It is os a subtile Nature, opens, expels,  
purifies, and dries. When bolled in Water, and often drank,  
rt removes Obstructions of the Liver and Kidneys, cures the  
Dysentery, and is wonderfully beneficial in a simple Goner-  
Thcea. Its Juice, depurated and mined with white Wine, may,  
with Soccers, be drank in the Beginnings of Dropsies. *Sr. Th.  
Mayrrne, L.* 3. *Prax. sided. Cap.* Io. If its Juice is taken in  
Wine, it cures the Bites of venomous Animals: Its Juice also  
cures Pains of the Ears, when it is made warm, and dropp’d into  
them.' If the Herb itself is boiled with Salt, it cures Excres-  
cences,. when applied to them by way of PlaisteI. If reduced  
to Powder, it cutes Ulcers and Wounds., and, according to  
*Pliny,* stops Haemorrhages. *Tragus* assures us, that its distilled  
Water cures the Jaundice and Dysentery: It is also very effica-  
cious in Disorders of the Kidneys. It eases racking Pains of  
the Breast and Hypochondria. *Paul. Quadr. Botan. Clajsc.* 3.  
*Fr. Joel, L.* II. *Pract. Sect.* 4. commends it against a Car-  
dialgia in Children.

APARTES, ἀπαῥτὴς, from the *'sonic darofsque* for ἀπαῥτάω,  
to be suspended. Suspended, pensile. *Hippocr,* περὶ αρί.

APARTHROSIS, άπάρβρωσις. See **ABARTIcULATIo.**

, APARTI, APARTIOS, *dor asci, lumastius.* Adverbs used  
by *Hippocrates, de Rat. Vict. in More. acut.* and elsewhere ;  
and expounded by *Galen, Erotian, Suidas,* and *Hespe bias,* by  
ἀπηρτισμέιως καὶ ἀχοιβώς; that is, *wholly, exactly, exquisetely, ale.  
selutely.*

APARTISIS, ἀπάρτισις, from ἀπαρτίξω, to persecti A tom-  
pacled Body, or Frame. Thus ἀπάρτισις τῶν νεὑρων, in *Hippoc.  
.sriciagip.* signifies the Frame or System of the Nerves.

APATEONES, ἀπατεῶεστς, from άπἀτ». Deceit, a Cheat  
Impostors. *Hippocr, esuri dur.*

APATHES, ἀπα,οῦς, from α Negative,' and πάθος, an Af-  
fection, or Passion ; such as are, or seem to be, void of human  
Passions. Instances you have in *Pliny, Lib.y. Cap.* i9. ’Tis  
reported of *Crajsas,* fays he, the Grandfather of him who was  
killed in *Parthia,* that he never laughed, and was therefore  
called *Agelastus;* and many were never known to weep.  
*Sacrates,* fo famous for Wisdom, always appear’d with the fame  
Countenance, being neither more or less chearsul or sad at one  
tube than another. This Disposition of Mind is sometimes  
carded to a herd and inflexible Roughness and Sternness of Na-  
ture, which extioguishes the Affections of Humanity. Persons  
of this obdurate Temper, were, by the *Greeks,* call’d *Apatbes,*many of whom they bad among them; and, whet is strange,  
most of them Professors and Teachers of Wisdom ; such as  
*Diagenes* .the Cynic, *Pyrrho, Heraclitus,* and *Timm,* which  
last was arrived at such a Pitch as to hate all Mankind.

AJPATHIA, ἀπάθεια. An Apathy, or such an insensible  
Temper as is desorrhed in the preceding Article.

APECHEMA, ἀπηχημα. from ἀπὸ. and ηχος, a Sound.  
Properly a Resounding, or Repercussion of a Sound; hut, in a  
medicinal Sense, it signifies a Contrafissure. See CONTRA-  
rissURA.

APEIBA. *Arbor pondsera Brastlieasts fructu hispida Pomi  
'Aelagultndine, seminibus plurimis minimis.* Αρϊιβλ *Brastlieast-  
bus,* Marcgr.

This Fruit is of no Use to the Inhebitants ; but the Wood  
serves to make Fishing-boats, and Rafts to oast Rivers. *Pay  
Hist. Plant. v .*

APEIROI, απκροι. from α Negative, and ποῦρα. an Expe-  
riment Unexperienced, unaccustomed. *Hippocr, de Ratione  
'Vict. in Morbis acut.*

APEITHEUMENA, ἀπειθηὑαενα, from Λ Negative, and  
πάβομαι, to be persuaded, to hearken to. Things in which the

Patient will not obey the Directions of the Physician. *Hiplai.  
Prorrh.* I.

APELLA, λβπόδίραος. By this Name *Galen,* calls those  
whose Prepuce, either, thro’ a Disease, .Section, or Con-  
traction, is insufficient to cover the Glans.

APELLIDES. Α famous Engineer, who, with *Archi-  
medes,* lays Claim to the Invention of a Machine for launching  
of Ships ; the Model of which the antient Surgeons imitated,  
in contriving a Machine for restoring Fraftures and Luxations,  
which, because it was worked by three Cords, they called  
*Trispast run Apellidis seu Archimedis.*

APEMPOLESIS, άπεμπολησις, from ἀπεμπολάω,. to mer-  
chandise. A Trafficking or Selling. This is the proper Signi-  
fication of the Word, according to *Hiesecherus.* In this Sense  
ἀναγκαίως καίαρσίων άπεμπολησιςν in *Hippocrates,* πεεί έυονημ,  
must import, that, among other Qualifications he there requires  
in a Physician, he must be furnished with a Stock of purging  
Medicines, which he may fell to his Patients. Others under-  
stand άπεμπολησις, in a contrary Sense, to he an Abhorrence of  
selling or making Profit of his Medicines; or take it for an  
Aversion to Trafficking in general, as unbecoming a Physician,  
and betraying a Desire after Lucre. This latter interpretation  
will appear the more probable, if we read the Passage, as it  
stands in *Edit. Fol. Gen.* I657. *cum Foesei Oecon.* which is thus:  
\*Ειδιισις τῶν πρας βίον χριιστῶν καὶ ἀναγκαίως καθαρσίων\* άπεμπο-  
λησις. άδ«σιδαιμ.ονίη- " Α Knowledge of such purging Medi-  
" cines as are useful and necessary in Life ; an Aversion to gain  
" by Trafficking ; a Mind free from Superstition.”

APEN. SeeAMBALAM.

\_ APENES, άπηνές. Harsh, unpleasant. *Hippe de Rat. Vict.  
in Morb. acut.*

APENSALUS. A Vessel with a narrowNeck to hold Oil.  
*Rulandus.*

APEPSIA, *dors.Lia, from a.* Negative, and πέπτω, to digest.  
Indigestion.

APEPTON, απεπτον. Crude, indigested. See CRUDUW.  
APER. See PoItcUs.

APERIENTIA. Aperitives, or aperient Medicines.

APERlSTATON, άπεείστατον. from α Negative, and πεείστα-  
σις. Affliction, Danger. An Epithet in *Galen, for* an Ulcer  
that is neither troublesome nor dangerous.

APERITTOS, ἀπέειἠος, from, α Negative, and πἱειῆὀς»  
redundant. An Epithet of such Aliments as generate but little  
Excrement, as the Flesh of wild Animals, and such as live in  
dry Places. The opposite Quality is called *Perletomaticos,*πίειῆωματικοστ ' . ’ . .

APERTUS, taken for *exulceratus,* as *Apertae Struma in  
Scribonius Largus, Nando.* 8r. is the fame with *Plinsu Struma  
exulcerata. Lib.* 30. *Cap.* 5. *Rhodius in Natis ad Scrip.  
Largurn.*

APES, Offic. Schrod. 5. 334. Aldrov. de infecti 20. Jonsi  
de Insecti I. Mouss Insecti I. *Apla,* Charin Exer. 36. *Apla,*Mer. Pin. 196. *Apis domestica'seu[vulgaris alvearium.* Rail  
Insect 240. BEES.

HiveBees, as they are called, are too well known to want a.  
Description. I shell leave the (Economy of these industrious  
and useful Infects to Naturalists, whose Province it is to consi-  
der it: But must remark, thet Bees have furnish’d more Mate-  
rials for Fables than for Medicines. Their Salts are, however,  
very volatile, and highly exalted *for* this Reason, when dry’d,  
powder’d, and taken internally, they are diuretic and diapho-  
retic. If this Powder is mix’d in Unguents, with which the  
Head is anointed, it is raid to cine the Alopecia, and tju contri-  
bute to the Growth of Hain udon bald Places.

All the Productions of Bees are used in Medicine, as Honey,  
an admirable Remedy in many Disorders, and very useful in a  
great Number of Officinal Compositions. See Mri. ρέ

Wax, a very common Ingredient in Plaisters, and in the Bal-  
sam of *Lucatellus,* a very filly Composition. See CERA.

Propolis, *Bee-bread. See AMBRA,* and PRopoLis.

APEUTHYSMENOS, ἀπἱυίὑσμὲνος, from εὐίὑς, strain  
‘ The Name of the' *Intestinum Pessum,* or Strait Gul. *Gcr~  
raeus.*

APHACA, Offic. Ger. Emac. I250. Park. Theas. Ic67.  
Raii Hist. I. 899. Synop. 3. 320. Tourn. Inst: 399. Elem.  
Bot. 3I8. Boern. Ind. A. 2. 45. Rupp. Flor. Jen. 2II. Merc.  
Bot. r. 24. Phys. Brit. 9. Mer. Pin. 9. *Latkyrus luteus an-  
nuus foliis Convolvuli minoris.* Hist. Oxon. 2. 52. *Vicia lutea  
foliis Convolvuli minoris,* C.B. Pin. 345. *Vicia quae Pit ire Ac~  
gulllara, lata seliaua store luteo,* C. B. 2. 3I6. Chah. I48.  
YELLOW VETCHLING. *Dale.*

*Apkace* is a small Shrub that grows in plough’d Lands, and is  
taller then the Len til, and bears a thin Least and larger’ Pods  
than the Lentil, which contain three or four Seeds, lest than  
Lentils. i / \_

The Seeds have an astringent Quality, by virtue of which  
they stop Fluxes of the Belly and Stomach, if they are roasted,  
or shell’d and boil’d like Lentils. *Dioseerides, Lib. a. Cap.*I78. .... -

*-suX.da* not find any other Medicinal’ Virtues attributed to it by  
the Moderns. :

APHJERESIS, ἀφαἀρεσις, from ἀφαιρέω, to take away; a  
removing or taking away. In a general Sense it signifies a re-  
moving whatever requires it in a Medicinal way, and is opposed  
to. *Prosthesis, mgisSreaes,* Addition.- Aphaeresis, in a stricter  
Sense, is that Part os Surgery which takes off what as super-  
fluous.

Ἀφαίρεσις, in *Hippocrates,* περί ἐυσχημ, signifies Rapacious.  
ness ; and άφαιρέοτες τῶν άιμάτων, *Coaca Pranot.* are sponta-  
neous Haemorrhages, according to *Foesius. - -»*

APHANISMOS, άφανισμὸς, from αψανἰζω, to make to dis-  
appear. An Evanescence.

Ἀφανίζομαι, is a Verb often used by *Hippocrates,* and, aS  
explain’d by *Galen, Comment.* 2. *in Progn.* signifies to Vanish,  
Or disappear on a sudden. \*

APHASSOMENOS, ἀφαπὸμενος, from ἀφάισω, to handle.  
Felt, rubbed with the Fingers, handled. *Galen, apud Hippoc.  
in Exeg. '*

It is. frequently by *Hippocrates* apply’d to *Touches* the  
Pudenda in Women, in order to discover Disorders of those  
Parts. See TAcTUS.

. APHEBRIOC, Sulphur. *Rulandus.*

APHELIA, ἀφέλεια, from ἀφελῆς, simple, plain; A Simpli-  
city in teaching and practising Physic, proper to the Sect of the  
Methodists. *Galen. M. M.L An c.* 4. *Castellus.*

APHeLICESTEROS, ἀφηλικέστερος, of ἀπὸ, from, and  
ήλικία. Youth; one past the Flower of Age. *Hippocr. Lib.* 7;  
*Epid. .*

APHEPSeMA, ἀφέψίίμα, from εψω, to boil; a Decoction;  
*Dioscorides.*

APHESI3, ἄφεσις, from ἀφίημι, to remit, in *Hippocrates,*generally signifies the Remission or Solution of a Disease ; but  
in *Epici. Lib.* 3. as *Galen* explains the Word, is to be taken  
for a Resolution of all the Parts os the Body.

APHILANTHROPIA, «φιλανθρωπίαν from α Neg. and  
φιλανθρωπία, the Love of Mankind ; the first Degree of Melan-  
choly, when a Person hates Society, and delights in Solitude.  
*Castellus.*

: APHLEGMANTON, ἀφλέγμαὑτον, from α Negative, and  
φλέγμα. Phlegm ; void of Phlegm. 'Αφλέγμαντον πήον, is PuS  
free from Phlegm ; the Absence of which, *Hippocrates,  
Prorrh. st..* reckons among the Marks os laudable Pus.

APHODOS, ἄφοδος, the Recrements of the Aliment which'  
pass off by Stool, or the Excretion of the same. *Gal. Com.* 5;  
*in 6. Epid.* &c.. *Hes.ychius. Poejius.*

APHONIA, *decoria.,,* from α Neg. and φωνὴ, a Voice ; a  
Deprivation of Voice. ‘ .

*Hippocrates* does not use to call those *Aphonai* who are de-  
priwd of Voice only ; but, by way os Eminence, shews, that  
under this remarkable Defect, we are to include that of all spon-  
taneous Action? Sometimes the Patients retain their Sensation;  
for he says himself,' Τῆς 'άφώνους ἀιιθανομένβς συμβαίνει γίνεςθαι;  
πολλἀκις δέ ἄμφω πέπονθεν, ῦπερ άποπληξίαν ονομάλίισι, ἀ-ευ'ους.  
" Though depriv’d of Voice, they happen’d to retain their.  
" Sensation; but oftentimes they suffer a Deprivation of both,  
" which is called an *Apoplexy so Galen. Com. ad Aph.* 5i..

It is usual with *Hippocrates* from this one most evident  
Symptom, *Aphonia,* to name and signify those who are totally  
deprived of voluntary Motion and Sensation, and lie like Per-  
Tons in an apoplectic Fit. *Idem, in Com. ad Aph.* 58. *\* Lib. η. .*

In this Place the Manner of *Hippocrates* is Very observable,  
who, by *Aphonti, rcaezuss* those who labour under a *Carus.*Now a *Carus* properly is a sudden Deprivation of Sensation .and  
Motion, affecting the whole Bodyand it is an ufual thing with  
*Hippocrates* to call this Disorder by the Name of this fingle  
Symptom, *Aphonia. Idem, Com. ad Asch. ζ. Lib.* 5.

*. Hippocrates, Lib. de Rat.Vict. in Morb. aatt.susjs,* Τὸ δ^  
αφωνον ἐξαίφνης γενέσθαι φλ.εβῶν ἀπολήψιες ποιέκσι. \ " A Stop  
" put to the Circulation of the Blood and Spirits causes a sud-.  
" den Loss of Voice.” Here *Galen* observes, that by this one  
common Symptom *Aphonia* are denoted the Epilepsy, .Apoplexy,  
and Cardiacal Syncope. He adds, that an *Aphonia,* in sick  
Persons, din sometimes caused by aDisorder affecting the Organs  
of Voice or Respiration with a Resolution, or by some other  
Depravation of the Faculty. But *Hippocrates,* in order to  
make a Difference between this and the preceding *Aphonia,*adds, by way of Distinction, ἤν ὑγιαίνοντι συμβαινη, /" if they  
" happen to a Person in Health." Thus sar *Galen.* . An *Asthe-  
nia* of this Nature proceeds from a Disorder of the Brain, a  
Refrigeration Of the naturaLHeat, and total Cessation of the  
Locomotive Powers, when tho Organs of Voice are in such a  
State of Resolution, that the Patient can neither cry, groan,  
nor utter any Sound.. I chute therefore to renderr-αφωνος, de-  
priv'd of Voice, *(voce defectus ac privatus J* rather than dumb,  
*(mutus)* fince *Hippocrates,* περί σαρκῶν, and *Aristotle, Lib.* 4.  
*Hist. Arion.* attribute *eplayn* (Voice) to the Dumb. \_ *Foesius.*

By the Word *Speech* wo commonly understand such an Emis-  
sion os articulate Sounds, as is capable of conveying .the Ideas of

A

a Manis Mind to his Neighbour; whereas the Voice is not,  
properly speaking, an articulate Sound, but a certain diversified  
Illilion and Repercussion of the Ain thrown v/ith a kind of  
Force through the *Aspera Arteria,* the *Larynx,* and its Fissure  
. called the *Glottis,* to the Cavity of the Mouth and Jaws. Thus  
tho' *Speech* and *Vince* are different things, yet the former can-  
not subsist without the latter; for when the Organs necessary  
for emitting Sounds, especially the Aspera Arteris, and its  
Head the Larynx, With then respective Cartilages, Muscles,  
.and Nerves, or the Roof of the Mouth, are Vitiated, the Power  
of forming Sounds, and consequently the Faculty os Speech, is  
destroy'd. Now *Galen* long ago prov'd by reiterated Experi-  
ments, that when one of the recurrent Nerves which are  
form'd by the *Par Fagurn,* and the *Nervus Accesserius,* and  
reach to the Larynx, and, according to *Winstow,* to the Tongue  
itself, is cut, the Animal becomes only capable as it were os an  
half and unfinish'd Pronuncistion ; and, when both are cut, it  
loses at once the Power of uttering Sounds, and the Faculty of  
Speech ; or, in other Words, becomes entirely dumb.

This Incapacity of. emitting Sounds, and consequent Loss of  
Speech, a Case which frequently happens in Hysteric Suffoca-  
tionS, is by Physicians call'd *Aphonia.* But I take ths Word  
*Aphonia* in a more restrain'd Sense, and confine it to that Inca-  
pacity of speaking or emitting articulate Sounds, which depends  
upon some Fault os the Tongue ; in which Case Sounds may be  
utter'd, but the faulty Tongue cannot articulate them right,  
and seems, as it were, to be silenc’d by its own fruitless Strug-  
gles. There is an Affinity betwixt this Distemper and that  
Hesitation in speaking, which we commonly call Stammering ;  
in which Case indeed articulate Sounds are form'd, but not  
distinctly enough express'd, because the Tongue is too flow, as  
it were, and incapable to cloathe the Ideas with Language, with  
the same Celerity with which they are excited in the Mind.

Now fince in an Aphony the Tongue is principally in Fault,  
and since we consider it aS the Seat of the Disorder, it will not  
be improper to take sucina View of its Structure as we think  
necessary, to answer our present Purpose. The Tongue then  
is a Muscle of all others perhaps the most moveable, by reason  
os its longitudinal, transverse, perpendicular, acuminated, an-  
gular, and other Varioufly disposed Fibres; and by means of the  
Mylo-stylo-hyo and Genioglossi Muscles, as well as those  
ascrib'd to the Os HyoideS, it can move itself most nimbly and  
exped itioufly in all possible Directions. These Muscles now  
mentioned derive insir *Vis Matrix,* or moving Power, from  
the third Branch, called the lower Maxillary Branch, of the  
fifth Pair of Nerves, which, is almost totally employ'd in pro-  
ducing-Motion ; just as the ninth Pain seems to be destin'd for  
the Purposes of Taste.

If by the Volubility of the Tongue, and Its Capacity of mov-  
ing in all Directions, Sounds form'd by the Assistance of the  
Larynx are modified into certain Letters, Speech is produc'd ;  
but the more difficult the Motion of the Tongue is, the more  
difficult Speech must consequentiy be ; and when its Mobility  
ceases, .the Faculty of Speech is destroy'd with it, tho’ Sounds  
at. the same time may he clearly enough utter’d.

Since the Motion of any given Part is either diminish'd or  
destroy'd by the Diminution or Interception of the nervous  
Fluid, which should flow into its Nerves ; and since the Nerves  
destin'd for the Motion of the Tongue arise principally from the  
fifth Pair; it plainly appears, that the Seat of an Aphony is to  
be sought for in the said Pain, and that the influx of the ner-  
vous Fluid into that.Nerve, being more or less diminish'd, is to  
be assign'd as its immediate Cause. In this Opinion we shall be  
confirm’d, if we carefully dissect human Subjects, who, during  
their Lives, were *aphonous.* Thus *Bonetus [in Sepulchr. Anas.  
L.* I. *Sect.* 22. *Obs.* 7.] affirms, that in a Man, whose Me-  
lancholy degenerated into Madness, and who remain'd *aphonous'*to.bis Very Death, he found the Brain Very dr}’, arid the Origin  
os the Nerves in the same State, but much smaller than ordi-  
nary, the Tongue in the mean time remaining unaffected ; and  
[cthse 2o.j he quotes a Case from *Rivcrius,* of a stammering  
Person, in whose Brain about the Lingual Nerves a *Cystsis* was  
found with a Hole in it, from which a Serum always drivell'd.

Whatever therefore tends to hinder the Influx os the nervous  
Fluid into the Nerves destin'd to the Motion of the Tongue,  
that Very thing-contributes proportionably to the bringing on an  
Aphony. Hence a Palsy os the Tongue, which iS either ante-  
cedent or subsequent to Hemiplectic or Apoplectic Disorders, de- \*  
serves our most attentive Consideration. This Disorder some-  
times happens in old Men, and in languid or much weakened  
Constitutions. Is it appears alone, 'tis generally the unwelcome  
Omen os an approaching *Hiemiplexy* or *Apoplexy* ; but if it suc-  
ceed these Disorders, and is complicated with a Weakness of  
Memory, and a fluggish Heaviness os the mental Powers, it  
threatens the Return, of the former Distemper. In this Cafe  
the Tongue is generally tumid, flaccid, half numb'd, less fu-  
sceptible of Motion than in its natural State, its Taste impair'd ;  
and in an Hemiplegia it is vitiated and faulty only in one Side.  
*i* That *Aphony* is like .to. terminate more happily, which pro-  
CeedS from a Stagnation, or Secession of serous Humours oom-

Pressing the Nerves of the fifth Pain, which run to theTongue;  
but It is no less afflicting to the Patient, and proves sufficiently  
obstinate against the Means os Cure. Aphonies of this Kind  
happen aster, the striking-in os serous Pusties and Efflorescences,  
especially in moist and rainy Seasons, Thus we may read os  
Aphonies aster restrained Sweats ; after Catarrhs unfltilfully  
treated, in *Fsrestus, Lip.* 14. *Obs.* 32. after the Small-pox, *etc.*These Kinds of Derivations of Serum to the Lingual Nerves  
may also he occasioned by external Violence, Blows, or Falis.  
Thus *Poterius, Cent.* 2. *Cap.* 2. gives an Account of an  
*Aphony* occasion'd by a Fall from an Eminence.

. There also arises an *Aplenty* from too great a Congestion of  
Blood in the Fauces and Tongue ; but this Species os the Dis-  
order generally uses to quit the Patient immediately, upon Jef-  
inning the Quantity of Humours. An Instance of' this Degree  
of the Disorder's being cur'd by a subsequent Haemorrhage from  
the Nose, may be seen in the *Acta Academ. Natur. Curios.*This Disorder likewise ensues aster letting Blond in the *Pena  
Eanince,* if the Operation is perform'd in plethoric Habits,  
without previous V enesection in the Foot. From cutting these  
Veins, without this necessary Caution, Experience telis us,  
that Very terrible Inflammations of the Fauces proceed ; hut  
more especially from this Cause I have known *Aphonies* brought  
onWomen whose Menstrual Discharges were defective, or who  
labour'd under the Hysteric Passion, the Spasms os the Lower  
Belly concurring to foment the Disease, and force the vital  
Humours to the superior Parts. Hence we frequently observe,  
that Girls at the Age os Puherty, or when they begin to.oh- .  
serve the first Eruptions of thein Menses, are often subject to  
this Disorder. In this Case, the Distemper uses to be accom-  
panied with a Swelling and Redness of the Face and Eyes, a  
turgid State of the Vessels, a Vehement Pulsation of the Arteries,  
and a difficult Deglutition.

- An *Aphony* proceeding from Worms lodg'd in the Cavities  
of the Stomach and intestines deserves our Consideration, he-  
cause it occurs pretty frequently. This Species of the Disease  
seizes the Patient suddenly, but ceases to rage when the Worms,  
its remote and secondary Cause, are dislodg'd. It is known by.  
antecedent or concomitant Gripes of the Belly, or by the other  
diagnostic Symptoms *of Worms.* Its direct and immediate  
Cause is the spasmodic Contraction of the nervous Parts of the  
Lower Belly, *by* which the Vital Juices are with a strong Im-  
petus driven to the Tongue and Fauces, where they stagnare,  
and compress the Nerves. I myself have not only seen many  
Cases of this Nature, but also cur'd them with Success: Nor  
do we want Coses of this Kind occurring in the Practice of other  
Physicians; see *Act. Academ. Natur. Curias. Dec.* 3. *Ann.* 3.  
*Obs. lisp. Fol.* 2. *Obs.* 62. And *Ibid. Obf.* I6O. there is a Case  
of a *periodical Aphony,* winch seiz'd the Patient as often as the  
Worms excited Gripes, and ceased as soon as these Gripes  
went off.

. There are also other Causes, which, when they occasionally  
take Place, contribute Very much to *an Aphony,* such as the  
wanton Abuse of spirituous Liquors, and frequent Surfeits.  
Thus *Hippocrates, Sect.* 5. *Asch. esc* mentions an *Aphony* pro-  
ceeding from Drunkenness *: To* the Causes of this Disease he-  
long alio excessive Fear and Refrigeration, especially of the infe-  
rior Parts ; and all these exert their Influences the more power-.  
sully, if they happen at a Time when any of the natural Dis-  
Charges of Blood is carrying on. Nor ought I on this Occasion  
to forget a rainy Season, and residing in damp and marshy.  
Places, Circumstances which contribute not a little to this Dis-  
. order, especially in phlegmatic Constitutions, and inch as are  
subject to Catarrhs. The Prognostics of *Aphonies* Vary, ac-  
cording to the respective Causes from which they proceed.  
That Species which owes its Origin to Worms, Hysteric Dis-  
orders, or a difficult Eruption of the Menses, is easily cur'd ;.  
whereas that Kind of it which proceeds from a Palsy of the  
Tongue, either entirely frustrates the Use of all Means, or being,  
cur’d, easily returns, and proves the direful Harbinger of a more  
terrible Disorder os the Brain. .

*The* **CURE.**

.The first Intention of Cure, in an *Aphony,* is to remove the  
Causes compressing the Lingual Nerves, and thereby hindering  
the Influx of the nervous Fluid into them. The second is to  
♦ strengthen and corroborate the weakened Parts: But as these  
Causes differ very widely from one another, so he that.will take  
the Trouble of thinking, must plainly perceive, that they, call  
for proportionably different Methods of Treatment; andytis.no  
hard blatter for any one to tee, that an *Aphony,* produced by. a  
Couse that lies latent and remote in the Cavity of the Cranium,  
must with incredible Difficulty admit of a Cure. *. sc. l.*

That Species, of Aphony therefore which proceeds from a true  
Palsy of the Tongue, calls for a Discussion and Evacuation of  
the Serum, which com presses the Nerves and Brain . The Cure  
is therefore to he attempted by Venesection, pretty sharp Cly-  
sters, Diuretics, Sternutatories, *etc.* but especially nervous and  
balsamic Medicines are Io .take place, and he apply’d even ^ex-

**ternally to the Tongue itself For this Purpose the following  
are recommended: ' .**

Strong Waters of Lily of the Valley, Cowsiips, Rosemary,  
Mother of Thyme, of Ants, Essence of Amber, and of  
Peruvian Balsam, Oil. of Cinnamon, and of Clove-gilli-  
stowers, and a few. Drops of my *Balsumum Vitee,* taken in  
Sugar, and kept under theTongue. Internally also the  
same *Balsumum Fitee,* mix'd with three Parts of the Vinous1Spirit of Sal Ammoniac, and two Parts Of the acrid Tin-  
cture ofAnthnony, may be taken with great Success, twice  
or thrice a Day ; and the Dose may he thirty Drops. Nei-  
ther will it be improper to apply a gentie Vesicatory to the  
Nape of the Neck.

- IfSuppressions of Sweat, or a Stop put to the usual Excretion  
in case of a Catarrh, have contributed to the Disorder, nothing  
Can he used with greater Advantage and efficacy, than Diapho-  
retics and Diuretics, duly and skilfully prescribed ; for imme-.  
diately upon the Diaphoresis being restor'd, the Faculty os  
Speech returns. Infusions to he .drank by way os Tea, a mild  
Regimen, succinated Spirit os Hartshorn, acrid Tincture of  
Antimony, and Essence os Amber, especially is they be mixed  
with Balsam of *Pcru,* Or my *Balsumum Vita,* are also most  
sovereign and efficacious Remedies in this Case.

An *Aphony* sometimes seizes the Patient under a mercurial  
Salivation, that is, when the serous and salival Humours flow  
to the Tongue and Fauces in too great a Quantity. In this  
Cose-the intention of Cure consists in making a Derivation and  
Evacuation os those Humours from the Head. This End is  
most effectually answered by diaphoretic Decoctions drank  
warm ; by Laxatives, and especially by cephalic Pilis of a pretty  
sharp and stimulating Quality, a proper Regimen in the mean  
time being enter'd into, and carefully, persisted in.

In an *Aphony* which remains aster the Shocks of an Hemiplexy  
or Apoplexy, and has all the Appearances of bring sufficiently  
obstinate, I have observed remarkable Effects produced by  
applying to the Nape of the Neck PlaisterS prepared of Turpen-  
tine, or Pitch, and the Gums Caranna and Mastich; for other  
Remedies, how rich and generous soever, generally dome short  
of Expectation, and disappoint our Hopes in this Case.

. If an *Aphony* proceeds from too great a Congestion of Blood  
in the Head, the whole Cure consists almost in setting Blond in  
proper Places, and in due Quantities. The Quantity taken  
from the .Patient must be large, and drawn just as Circum-  
stances require, either from the Arm, the Feet,, or sometimes  
the Veins under the Tongue. . Cupping and Scarification are  
also proper. The Feet must also he washed, in order to pro-  
cute a Derivation of the Humours to the inferior Parts. Ni-  
trous antispasmodic Medicines are also to be used internally,,  
hecause in Cases of this Nature the Spasms of the lower Parts are  
generally.complicated with some other Disorders? For this Rea-  
son temperating Powders, mixt with Nitre and Cinnabar, *ex*my anodyne Liquor, mixt with Essence of Castor, are highly  
serviceable in this Case.

The\* Bleeding is a Circumstance of great Importance and .  
Efficacy in the present Case, yet it is not to he used indiscrimi-'  
natesy and at random ; for in old Men, languid Constitutions,  
and Patients os phlegmatic Habits, or those whose Strength is  
exhausted, it does more Harm than Good ; and if celebrated in  
a larger Quantity than is sufficient to answer, the End, is so far  
from.guarding.against it, that it even excites and brings it on;  
Phlebotomy then should rather take place where the Pulse is  
quick and large, and the Face red and turgid with Blood. And  
even in this Case it is not to .he used, till the Strictures os the  
lower Parts be relax'd, and mitigated by previous Clysters,  
Frictions, and bathing of the. Feet. Plethoric People hefore  
Bleeding should carefully abstain both from the internal and ex-  
ternal Use of the hetter, more spirituous, and nervous Medi-  
cineS; .. because they stimulate the Humours more, and hurry On  
their Congestion to the Fauces.

If spasmodic Constrictions, of the Fauces- and Tongue have  
produced an *Aphony,* as happens in Hysteric and Hypochondriac  
Paroxysms, which are attended with Difficulty of Deglutition,,  
external Paregorics are os more Service than internal Medicines : -  
For this Purpose a.little Castor, or Nutmeg, or Theriaca, or  
Sage, may he held under the Tongue; or a sew Drops of the  
*Balsumum Vita,* mixt with some anodyne Liquor, - may he  
pour'd, upon theTongue. Besides bathing the Feet, carmina-  
five Clysters, emollient Fomentations and Baths, are highly  
serviceable in this Cafe.

Lastly, That *Aphony* which is produced by Worms lodged in  
the Cavities of the Intestines-and Stomach, is easily cured by  
Anthelminthin Medicines, and such as relax and mitigate the  
Strictures of the Intestines ; for when these are at an End-, the  
Power of speaking returns, but is again frequently lost, till the  
Worms, the remote Cause of the Disorder, are dislodg'd : For  
this Reason, when the Spasms are gone, the Physician is to en-  
deavour, by proper Remedies, to diflodge these troublesome  
Animals, «.effectually as he-possiblv can.

**. CASEI**

A Girl os a flabby- Habit of Body, a florid Countenance, still ;  
of Blood and Humours, and eighteen Years old, happened,*y-*after her Menses had broken out, in a Joumey she was taking,  
to expofe herself to the ColdBeing carried home again, she \*  
was seized with a heavy Pain of her Head, and the Vessels of  
her Face became turgid and red. She pass'd the Night in a  
Very uneasy manner j and in the Morning felt herself entirely  
depriv’d of. a Power os speaking. This Disorder lasted for  
four Days; during which Time she had neither an Appetite for  
Meat, nor an Inclination for Drink. Her Sleep was disturb’d,  
but she had the Use of her Reason and Senses ; and a Warmth  
was diffus'd over the Extremities of her Body. Her Physicinn,  
finding her costive, immediately prescribed a Clyster,, and -  
ordered about three Ounces os Blood to be taken from her "  
Ankle; but her*Aphony,* notwithstanding these Means, became τ  
still stronger and stronger.- Upon which I was call'd ; and  
finding her Pulse still quick and large, I ordered a Vein to be ''  
again opened, and seven Ounces os Blood to be taken from her;  
and as her Pulse was as yet sufficiently strong, I prescribed  
her thirty' Drops os a Mixture os Essence os Castor with Spi-

. rit os Sal Ammoniac, and some mineral anodyne Liquor, to be;  
taken every fourth Hour in Water os Lilies of the Valley; -  
Soon after a Sweat broke out over all her Body, the Swelling :  
of her Face abated, her Sleep became sound and undisturbed; '

. and,- by persisting, in the Use of this Medicine sor twenty-sour -  
Hours, her Faculty of Speech was wholly restored to her.- '

**C A S E II.**

This Case is an Illustration of the former: A .lean Girl, of  
' nine Years os Age, happening to heve her Body, but more espe-  
cially her Feet, exposed to the Cold, in the Night-time, was  
seized in the Morning with a Difficulty os Speech, and a Swel-  
ling os her Tongue. Cephalic and nervous Medicines were  
forthwith prescrib'd, both internally and externally, but they  
afforded no Relief. Upon this, I, being call’d, and finding her  
Feet still cold, ordered them to be rubb'd and bath'd twice a  
Day in common Water, with a Mixture of Bran in it: But  
this Expedient frustrating iny Hopes, I ordered Cupping and  
Scarification in both her Arms ; some Hours after which she  
felt great Relief; and by washing her Head with Wine, in  
which Thyine, Sayopo, Mother of Thyme, and Marjoram,  
had been infused, she was cured of her *Aphony,* and restored -to  
perfect Health.

**REFLECTION** *on both* **CAsEs.**

In both these Cases the *Aphonies rnCTc* produced by the Conge-  
" stion' of Blood in the Head, and this Congestion was excited  
' by the Refrigeration of the inferior Parts of the Body : But  
the Danger was greater in the former than in the latter Case,  
because in it the Menstrual Discharge was stopt at the same  
time. In the Beginnings of Disorders of this Nature, spe-  
cific, cephalic, volatile and nervous Medicines do more  
. Harm than Good, since they heat the Blood, and put it in-'  
to a strong Commotion ; such Remedies are rather to be pre-  
scribed as derive the Congestion from the Head, and mitigate  
or relax the Strictures of the inferior Parts, the principal of  
which are bathing of the Feet, and Venesection. Is the  
Feet are cold, I never order bathing them till they are Ten-  
der'd a littie warm by proper Frictions. I have often with  
great Success prescribed Bleeding at the Ankles for Women  
whose monthly Evacuations have appeared, but are after-  
wards obstructed ; but in the younger Sort, who have as yet  
had no Eruption of their‘Menses, Cupping and Scarification  
in the Arms is more proper, as also in Boys and Infants.  
'Tis worth while to give this Caution, that *a sufficient square-  
' tity of Blood be taken away,* since, is it as too small, it does  
x / more Harm, than Good : For this Reason I judg'd it proper  
to repeat it in the former of the above-cited Cases. If, aster  
all, the Vehemence of the Pulse continues, antispasmodic  
and gentie nervous Medicines are properly and successfully

\* used.

**. C A S E III.,..**

Some time ago a Gentleman of singular Merit, and one who  
deserves well of our Profession, ask'd my Advice with regard to  
a Disorder os a Very particular Nature, an Account of which must  
necessarily he agreeable to the Curious. A Boy of eleven Years  
of Age, hern of honest Parents, and who had till then enjoy'd  
an uninterrupted Stare of Health, not having ever in his Life-  
time been sensible of the least Defect or Faultiness in his Speech,  
became all of a sudden so far depriv'd of it, that he could imt  
pronounce any one Sound articulately, except the Word *Mama,*which at the same time he utter’d with a kind of Difficulty,  
and with a funk and faultering Voice. Painful spasmodic Ten-  
sions seiz'd him also in several Parts, which, drawing the whole  
Neck and Back into *Consent,* induc'd on those Parts an un-  
common Torpor, and Inability to move and hend themselves aS

\* thev did in their natural State.

The Physician, concluding that so terrible & Disorder‘must  
necessarily have Worms for its Cause, prescrib’d, what in other  
Disorders of that Nature would have proved effectual, that is, .  
Various laxative, corroborative, antispasmodic, and absorhent  
Medicines; and gain'd his End so far, that having by these  
Means procured a Discharge of fifteen Worms by Stool, the .  
Patient's Appetite, together with some Degree of his Strength,  
returned; his Sleep became sounder, and his Belly was easy ..  
but his terrible Impediment of Speech remain'd with him for .  
five-Weeks, -without ever so much as taking a favourable Turn.  
I therefore, judging it. proper to procure a more effectual Dis-  
charge of the Worms, prescribed the following Pilis, whose  
Efficacy against Worms I have often found very great, and of  
which I prescribed him seven Twice a Week; especially about  
the. Changes of the Moon, interposing a Powder, consisting  
os' .. ..... ..

Fifteen Grains of the Sal Catharticum Amarum; purified .  
’ Nitre, and Coral, each six Grains.

The Pills themselves were made thus :

Take Asa-soetida, the best Myrrh, Extract of Tanfy, .

Rhubarb, Aloes rosated, and Mercurius Dulcis, each one

" Dram ; Extract of Saffron, six Grains : Mix, and make ''  
up, according to Art, with Essence of Castor.- Twenty '  
Pills: are to be made out of each Scruple.

Daftly, That we might also afford some Assistance by exter-  
nal Applications, thy restoring the Parts too much weakened by  
the Spasms, we now-and-then ordered an Epithem, made of

Four Ounces of the Aqua Anhaltina; half an Ounce of my  
Balsam of Life; and two Drams of Peruvian Balsam.

By the daily Use of these Medicines for some time, his Speech  
return’d gradually more and more to him. .

**REFLECTION.**

Many and terrible are the Disorders brought on the nervous  
System by Worms, the Cause of which, I am inclined to  
think, donsista, not so much in the Corrosion of the nervous  
Coats of the intestines, as in the acrid and caustic Exhalations  
rising from the Bedies and Excrements of the Worms, in  
winch they, aS well aS all other Infects, abound. Number-  
less almost are the Medicines thought proper for distodging  
these Animals so hurtful to the Constitution ; but excepting  
Mercurius Dulcis, mixt with some Purgative, such as Resin  
of Jalap, or Diagrrydium sulphurated, I have found this In--  
' tention more safely or effectually answered by no Medicine,  
than by Afa-soetida, Tansy, Garlick, Wormseed, Camphire,  
and Hops, which operate upon these Animals rather by their  
Exhalations, being offensive to them, than in any other  
way.

Case **IV.**

About a Year ago, a Boy of eight Years of Age was seized  
with the Small-pox, which appearing Very thin, and stopping  
immediately after their Eruption, the Patient by that means  
became subject to several Disorders, and was in a particular  
Manner troubled with frequent Deductions of Serum, which  
used to bring on a Cough, Hoarseness, and Coryza. These  
Symptoms were indeed often allay'd by proper Remedies; but  
when they came at last to be accornpany'd with a great Swel-  
ling and Hardnefs of the Belly, his Physician ordered him two  
Vomits, the second Very soon aster the first, the Effects of  
which were Very unlucky; sor these forc'd Vomitings were  
soon after succeeded by spontaneous ones, which being accom-  
panied with a Diarrhoea, miserably rack'd the Patient for eight  
or ten Days. These Symptoms being mitigated, a sudden  
Dimness os Sight, and such an Immobility os Tongue, and '  
Difficulty of Speech, seiz'd the Patient, that he could not,  
with all his Efforts, utter one single Word. Besides these  
Symptoms, a large Swelling appeared on his Head, and a Vehe-  
ment Trembling and Weariness seiz'd his Joints ; which Sym-  
ptoms increased at last to such a Degree, that his Strength be-  
coming always weaker and weaker, he at last expired in a calm  
and gentie Manner.

**‘ REF L E C T I O N.**

There is hardly any Disease which leaves with Children so fatal,  
so Various, and so lasting Symptoms as a Variolous Fever, if  
either the Eruption or Suppuration os the Pox doos not go .  
duly on, or if the Mass of Humours is not reduced to a good  
State and Temper, when the Distemper is over, by a proper  
Regimen, and Medicines which purify the Blood. Hence it  
frequently occurs in the Practice of Physic, that after the  
Small-pox - or Meafles we find Diseases of the Breast arising  
from the Injuries sustain'd by the Lungs, Swellings and In- .  
durations os the Abdomen together with Fluxes arising from

the Viscera being affected ; and Atrophies of the other Paris  
produced by scirrhous Tumors of the Meseraic Glands : But  
nothing is either more absurd, or unsafe, than, without any in- -  
shearing Symptom, to exhibit an Emetic, by which, in our Pa-  
tient, the Flux was not only increased, but also the impure  
Serum, heing, by means of the terrible Spasms, propell'd with  
an Impetus to the Brain, produced, first a Palsy of the Optie,  
and then Of the Sublingual Nerves, the Consequence of which  
was Death. I could not sorhear laying down this Case, that  
People might hecome sensible what terrible Consequences ensue  
the unIkilful Administration of Medicines,

**CASE V.**

A Man of eighty Years of Age, of a dry Habit of Body,  
and accustomed to let Blood at least thrice a Year’, that is, in  
the Months *February, June,* and *October,* enjoy'd an excellent  
State both .of Body and Mind. But one Season, which was  
hotter than ordinary, he, by the Advice of a certain Physi-  
cian, neglected his accustom'd Evacuations ; upon which, being  
suddenly seiz'd with an apoplectic Fit, the Pulsation of his Ar-  
tenes being strong, his Eyes hecoming red, and his whole Body  
excessively hot, he lost all his Senses, and an Ability of Speech.  
Whilst the Patient was in this Situation, I, being call'd, first  
order'd a Vein to be open'd in his Arm, and emollient Clysters  
to be exhibited ; and, without neglecting other Medicines,  
apply'd thy *Balsomum Vita* to his Mouth and Nose.- By these  
means, aecompany'd with the Blessing of Ged, we gain'd our  
End so far, that- the Violence of the Disease and its Sym-  
ptoms abating, the Patient gradually recover'd, only the Hesi-  
tation ofhis Tongue remained pretty long with him, which we  
nevertheless happily cured, by frequently washing his Mouth  
with Wine, into which some Drops of my *Balfamum Vita* had  
been instill'd.

**S . REFLECTION. -**

How efficacious and excellent a thing letting Blood is, both.  
for preventing and carrying off most Diseases, to which old  
Men are subject, may be learnt from this Observation: .

; And, indeed, a Very good Reason may he assign'd why it  
should be so; for in old People, especially such as have a  
good Stomach, and an entire Appetite, the superfluous Blond  
is not so quickly confum'd as in young People, by reason of

' their Indolence, and want os due Exercise ; and if Nature  
does not free herself of this Burden, 'tis necessary it should  
he drawn away by Art ; which is most conveniently done

- by Venesection. His Physician then, without any good Rea-  
- son, forbid his being let Blond during the Dog-days, which  
' at that particular Season was fo much the more necessary,  
because the too great Quantity of Blood, by having the De-  
gee *of* its *Expansion* and *Orgafm* augmented, might easily

ip here-and-there in the more noble Parts, and bring orL  
Very terrible Disorders. Nor is it to he doubted but in the  
Case now under. Consideration, this gentie apoplectic Fit,  
**with the** Difficulty os Speech, were produced by such a  
Stagnation of the Blood in the Veins os the Head. For  
- this Reason, the first Step I took towards the Cure, was  
. to order Venesection in the Arm, which produc'd imme-  
diate Relief to the Patient ; then I order'd emollient Cry-  
stars to be exhibited, and, for affwaging the Violent Motion  
i of the Bleed, recommended .some Dofe of. the Powder of

Nitre, to he taken at proper Intervals, desiring the Patient,  
\* at the same time, to drink an Infusion by way of Tea made.

of the Herbs of Bawm, Betony, and Carduus Benedictus,  
Flowers of Sage and Rosemary ;. together with a sew Drops  
of the Oil of Mace, dropp'd upon a littie Sugar. From this.  
Case we have a convincing Proof, that an *Aphony* is not  
' more frequently the Concomitant of any Disease, than of  
an Apoplexy; since the former often remains some time,  
' or is easily generated aster the latter, if the Serum secern'd  
from the Blood stagnating in the Head should enter the  
- Pores of the Brain, and, by relaxing the Roots of the Nerves,  
deaden or weaken the Sensation and Motion of. the Parts to  
which the Nerves distribute themselves. *Frederic Hoffman,  
Med. Rational. Syst.*

" - - Case **VI.**

A Girl of twenty or twenty-two Years of Age, and of a  
good Constitution, after a Stop put to an intermitting Fever by  
the usual Remedies, was seized with an Extinction of Voice,  
which without Interruption remained with her for a Year and  
an half. The Remedies used in Coses of that Nature, afforded  
her no Relief, only when she used a Semicupium, [See SEMI-  
CUPIUMj she sometimes recover'd her Speech whilst she was in  
the Water ; but her Voice was, even at that Time, Very  
hoarse. 'Tis also Very remarkable, that she could speak during  
the het Fit, whenever her Fever return'd. Mr. *Lemery,* to  
whom the Case was related, prescribed such Remedies as. upon  
physical Reasoningthe judged most proper to remove it. These,

indeed, 'freed the Patient from some Inconveniencies, which  
' remained after her Fever, but had not the least Influence upon

her Extinction os Voice. Upon which, Mr. *Lemery* prescribed .  
a Medicine almost by Chance, which produced Very astonishing  
Effects. The Medicine itself was no more than some Vulne-  
rary Herbs infused by way os Tea. After she had\* taken it the  
first time, her Voice returned for half an Hour, and then was  
extinguished afresh. - But by continuing the Use os this Infusion  
of Vulneraries. either hot or cold, she gradually recover'd her  
Voice so far, that she only lost-it towards Night, especially if  
she happen'd to take the fresh Ain But at last, even in that  
Cafe, the Symptom was remov'd by taking two Spoonfuls of  
her Vuinerary Infusion, which produced so instantaneous an  
Effect, that she had scarce sooner taken it, than she was able  
to speak. It was by some thought, that in this Case, the effi-  
cacy of Vuineraries was no greater than that of warm Water ;  
but their Mistake was sufficiently prov'd by the best os Argu- .  
ments : I mean. Fact and Experience ; for the Patient fre-  
quently drank warm Water, without receiving the least Ad-  
vantage from it. Decoctions of Herbs abounding with Acids,  
and even Coffee, Chocolate, Sallads, crude Fruits, Fish, Soup  
Maigre, and mo great an interval between her Meals, deprived  
her of heriVoice ; whereas Fleshes, Milk and Wine, produced  
no such Effect. She always carries about with her a Bottle of  
her Vuinerary Infusion, and for that Reason uses, in a jocose  
manner, to say, *That sue has her Farce in her Pocket. Hist. de .  
st Acad.* 170O.

**CASE VIL**

A Girl of twenty-four Years of Age has, ever since she was  
Sixteen, been afflicted with a Loss *os* Speech, during her monthly  
Evacuations, which generally last for two or three Days, on :which occasion she makes frequent use of a Ptisan of the Gra-  
men Caninum, (seeAGROSTiS) and wild Poppy. This Liquor  
moistens her Breast, which indeed calls aloud sor a Relief of ‘  
that Kind, but does not restore her Voice, which only seems  
of its own accord to return when her Menses are over. At  
the Very Time she was under these Discharges, she happen'd  
to have her Arm broken, and to meet with a severe Affliction.  
These two Accidents put a Stop to her usual Evacuations, and  
brought on Violent Suffocations and Vapours. These Sym-  
ptoms were removed by repeated Venesections in the Arms and  
Legs, by Emetics, and some other Medicines ; but at the same  
time she was seiz'd with a continued Depression of Voice, and  
that to such a Degree, that she could scarce he heard when Peo-  
ple apply'd their Ears as near as possible to her Lips ; and if **she**spoke but a Very little, eVen in that saint and languid manner,.  
she was so fatigued, that she was oblig'd .to give it over. She\*  
felt a considerable Weight about the Region of her Stomach,  
and could not perform the least Motion without almost an en-  
tire Loss of Respiration. Her monthly Evacuations were at  
this time pretty regular, but all her other Disorders were re-  
doubled : Add to this, that, she look'd tolerably well, her Ap-  
petite was keen, and all her other Functions duly carry'd on.

in this Condition she remain'd for three Months, in spite of  
all the Medicines that could possibly be thought of for her Re-  
lies At last, Mr. *Lemery,* calling to mind a Disorder of the  
like Nature cur'd by his late Father, by means of Vulneraries  
taken in an Infusion, order'd the same for the Patient, of  
which when she had token one Draught, her Voice not only  
returned, but was as strong and Vigorous as it had heen before  
the Approach of her Distemper. Her Oppression, together  
with the Difficulty attending her several Actions and Motions,  
was entirely removed. But a still more surprising Circum-  
stance aecompany'd this sudden Cure ; for all of a sudden she  
felt the Weight about the Region of her Stomach sail down to  
her Navel, where it remain'd. But as she soon after chang'd  
the Place of her Residence, Mr. *Lemery* saw her no more,  
and consequentiy could trace the History os her Disorder no  
farther. *Hist, de ΓAcad.* I7I9.

APHORETOS, ἀφόρητος, from α Neg. and φίρ", to bear.  
Intolerable. *Hippoc. artel .neiffieer.* In the same Sense may  
ἄφοροςή νοῦσος. *Lib.* I.1 περὶ γυναικ. be taken as ἀφίρητος, and  
as oppos'd to ἔυφορος. ' ...

APHORISMUS, ἀφορισμὸς, from ἀφορίζω, to separate, di-  
stinguish. An Aphorism. It is defined by *Galen, Com.* I. im  
*Aph.* I. to he a Sentence comprehending all the Properties of a  
thing in Very few Words.

APHORME, ὰφορμῆ, of *Sai,* from, and *often,* A Motive.  
An Occasion, or external manifest Cause, of any Event. *Ga-  
len, Com.* 3. in *Lib.* 6. *Epid,* says, " That *Hippocrates,* and  
" almost all the Antients, used to call *Aphorme* the Matter of  
" any thing that was the original Motive to any consequent  
" Action, whether it were Money, or any other outward  
" Possession, or Faculty,' or Pisce, or Faith, or Practice, or  
" Reason, or, in short, whatever it might he. " *Hippocrates*casts *Aphorme* whatever gave Occasion or Rise to a Disease by a  
sort of Metaphor ; for *Aphorme,* in almost all other Authors,  
has relation to human Actions, and these Motives. *Foeftus.*

APHRAINON, ἀφραζνων, from α, .Neg. and φρονἔω,Ἀο  
be wise. One who lias lost the Use os Reason. *Erotian, apud  
Hippoc. . . . . -* **7.7. .**

APHRODES, ἀφράδιις, from *dpess.* Froth. Spumous, or.  
frothy. The Word is apply’d.by. *Hippocratis* **to** the Blood, .  
and to the Excrements. **. s .**

APHRODISIA, APHRODshlASMUS, ἀφραδισια, ἀρροδρά  
σιασμὸς, from Άφροδίτη, *Viaus.’* Venereal Commerce, *Hip-'  
poc. Apist, psa. Sect.* 6. *Castellus. si ... . si*

APHRODISIA, in *Johns..'aeatiRulandus,* is. the Venereal  
Age, or Age of Puberty. - . ....

SPHRODISIASTICON CLIDION. A Troche so call’d  
by *Galen,* and recommended for spitting of Blond,, the Colic,  
Dysentery, and Fluxes of the Stomach... It is thus prepared :

Take of the Flowers of the Pomgranate-tree, *Egyptians*Thom, Balaustines, Juice of Hypocistis, Acacia, each  
: fix Drams fifteen Grains Boxthorn, Rhubarb, Opium, ’

each four Drams ten Grains ; Myrrh, two Drams five  
Grains. Infuse them in Myrtle Wine, or in the Deco-  
ction os Roses, or *of* Myrtle-berTies. *Ps AEginet. Lib. J.  
Cap. IL. .i . . -si.*

APHRODISIUS MORBUS. The. fame as *Lues Vencrea.:  
Blancard. . . . \_ . .. ..*

APHRODITARIUM, ἀφραδιτἀριον. The Name of a  
Powder, recommended by *P. AEgineta* for hollow Ulcers,  
which is composed of equal Parts of Frankincense, Squama  
Airis, Rhoidarium, (see RHO1DARIUM) Amylum, and Ceruss.  
*P. AEginet. Lib.* 4. *Cap.* 40. and *Lib.* 7. *Cap.* I 3. \_

APHROGALA, ἀορα'γαλα, from άΦρὶς, Froth, and .γἀλα.  
Milk.' . E ..inἈ.

Neither *Galen,* nor any other Writer on the *Materia Medi-  
ca,* has told us what it is ; but it .seems to signify the Froth of  
Milk, or that concreted Part of the Milk on the Top, which  
looks like Froth, or that rich and fat Substance, which may also  
he called *Epipagus,* ἐπιπαγος, (Cream) and which *Nicander,,  
in Theriac.* advises to he drank against the Poison, of the *Ixias..*Others say, that by *Aphrogala* is to he understood Milk stirred  
till it turns, all to Froth. *Pstiny* says, " That many os the bar-  
’ ic barons Nations, not knowing, or else despising, that useful  
" Food Cheese, had a Method of condensing their Milk into  
“ a gratefully acid Substance, and into a sat Butter, winch  
" was the Spume or Froth ofMillt. " *Lib.* II. *Cap.* 4I. By  
these Words we are to understand the *Oxy gala* and *Aphro-  
gala,* which latter was an excellent Remedy against a hot Dis-  
temperature of the Stomach, and a wholsome Aliment, in  
treat Repute among the *Ramans,* who used to cool it with  
now, as *Galen* tell us. *Meth. Med. Lib. η. Cap. An.* It seems  
**to he** like what we call Syllabub. ῖ . .. .

APHRON. The Name of a wild kind of Poppy, *Pliny,  
Lib.* 2O. *Case* T9. Also the Name of a Cephalic Planter, de-,  
scribed by *Aetius, Tetrab. An Serin. 3. Cap.* I 3..

APHRONITRUM, APHROLITRUM, ἀφροτατρον, ikeet-  
λετρον, from ά?πὸ, Spume, and νίτρον, or, in the *Attic* Dia-  
sect, λίτρον. Nitre, Spume os Nitre... See NITRUM. . V

APHROS, ἀ?ρίς, Spume or Froth. ..

. APHROSELENOS, άφροσέληνος, from σελήνη, the Moon.  
**A** precious Stone, otherwise called *Selenites,* from its represent-  
ing the Moon aS it were in a Glass. *Gorraus.*

. APHROSYNE, from ἀφρων, silly. Folly, Dotage., ***Ca-  
stellus.***

APHTHAE, ἄφθαι. Superficial small Ulcers in the Month.

*Hippocrates, Aph.* 24 *Lib. J.* informs us. That new-born  
Children, and those which are young, are much subject to  
*Aphtha.* This *Celsius* translating calls *Serpentia Oris Ulcera,*-Spreading Ulcers of the Mouth. *Lib. a. Cap.* I.

But it appears by many Passages in *Hippocrates,* that *Aphtha*are not confined to the Stomach ; for this Author mentions  
*Aphtha* of the *Pudenda of* Women with Child, and of the  
*Aspera Arteria.*

*Celsius, Lib. 6. Cap.* II. says, that, those Ulcers of the  
Mouth are most dangerous, winch the *Greeks* call *Aphtha,* but  
in Children especially, to whom they frequently prove fatal 4  
but in Adults, they are not attended with so much Danger.  
These Ulcers begin at the Gums, and spread to the Palate,,  
and over the whole Mouth, and descend even to the Uvula and.  
Fauces ; in which Case, it is not easy for the Child to recover.  
It is yet worse, if the Infant is yet at the Breast, because it is  
difficult to prescrihe proper Remedies for it. What is princi-  
pally to he done is, to make the Nurse exercise herself hy fre-  
quent walking, and use such Motions as move the superior  
Parts ; besides these, **she** must he put into a Bath, and be di-  
rected, whilst in it, to pour warm Water on her Breasts rMean  
time she must live on mild Aliments, and such as are not very  
subject to corrupt : Her Drink must he Water, if the Child is  
feverish; if not, it may he diluted Wine ; and, if costive, **she**must be purged. Is her Mouth abounds with Phlegm, she  
should vomit. The Ulcers must he anointed with Honey, to  
which that Fort of Rhus which is called *Syriac, (see* RHUS)  
and bitter Nuts, (see NUX) must he added; **or with a Com-**

position of dry’d Rose-leaves, Pine-kernels, and Mint, made  
up with Honey; or with the Medicine made of Mulberries,  
the. Juice of which must he boil'd to the Consistence of Honey,  
and with it Saffron, Myrrh, Wine, and Honey, must he  
mix'd. .Mean time, nothing must he given, which is capable  
os furnishing Matter for Humours. Is the Child has sufficient  
Strength, GargarismS must he us'd of the same Nature as the  
Remedies above-mentioned. But if milder Remedies are inef-  
fectual, such Applications are to be made use of, as by their  
caustic Qualities induce a Crust upon the Ulcers ; of this sort  
are Scissile Alum, Chalcitis, orVitriol. Hunger and Abstinence,  
in the greatest Degree that can he supported, are also usefid.  
The Aliment should he of a mild Nature. Sometimes, inorder  
to deterge the Ulcers, Cheese is properly enough apply'd in  
Honey. . - . ἐν .

*: Aretaus* Confines the Word *Aphtha* to malignant Ulcers of  
theTonslis, which are treated of under the Article TONSILLAE,  
which see. .........

*Oribasius,* aS *Celsus* has done, distinguishes *Aphtha* front’  
other inflammatory ulcers of the Mouth, in the manner fol-  
lowing : . ' ..

. When there is .an Inflammation of the Mouth, when the'  
Patient is of a plethoric Habit, or his Body full of corrupt.  
Humours, then we have recourse to Venesection and Purga-tfives, prescrihe Clysters, and injoin Temperance, both with  
regard to Eating and Drinking. If none os these Things aval!,  
we have immediate recourse to Topics, and fust of all en-  
deavour to subdue the Distamper by astringent and cooling Me-  
dicines ; such as the *Diamoron,* with the Addition of *Ompha-  
cium,* or Rose-bude ; or dry'd Rose-leaves, Balaustines, Pom-  
granate-peels, unripe Galis, Alum, Frankincense, purging  
Thistle, and a Decoction of Myrtle, and Scissile Alum. Then  
the *Confectio Mororum,* in which Saffron and Myrrh have  
heen put, is sufficient to concoct and ripen the Matter of the  
inflammation ; and when it is so. Digestives must he used.  
For which Purpose we use Aphronitrum, Nitre, and Sulphur  
Vivum, which is of all other Medicines the most powerful.  
We also sometimes mix with it Sapa, and sometimes Mulsum,  
in which Origanum, Hystop, Penyroyal, Thyme, Savory, or  
Catmint, have been hell'd : For Medicines of a moderate Qua-  
lity were invented, in order to he mix'd with others which have  
a direct Influence on the Disorder, as Necessity shall require.  
But in the Height of Inflammations of the Mouth, Medicines^  
are rarely to he used ; but the Mouth is only to be wash'd and  
gargariz'd with such Things as allay the Vehemence os the In- ‘ .  
dammation, such as a Decoction os Figs, a Decoction of  
Bran, or Oil of the Mastich-tree made warm in a double Ves- -  
fel. But the Medicine itself, which, because of its Influence  
on the Mouth, is call'd *Stomatic,* may in the Height of the  
Inflammation he used for washing the Mouth, if it is only-  
mix'd up with fufficientiy diluted Mulsum, and warm new  
Wine heil'd to two Thirds, and with warm Water, *if* none of  
these can be had. All these I have mention'd, that the Patient  
might have Choice of Medicines accommodated to his Case. But,  
in general, all Ulcers of the Mouth, winch are flaccid, require  
highly drying Medicines, such aS Recrements of Copper, both  
with and without Honey or Mulsum. The Troches of *Mufa, '*the Juice of Rhus and Omphacium, are also of Service in this.  
Case. But milder Ulcers of the Mouth may he cur'd with the  
Medicines appropriated to *Aphtha,* such as the *Diamoron,* or a  
Preparation of Bramble-herries. But when Ulcers of the Mouth,  
are Very moist,, and he pretty near the Bone, there is Danger  
of their mortifying. In this Case, therefore, the strongest and  
most powerful Medicines are necessary ; for which Purpose, we  
reduce one of the sore-mentioffd Troches to a Powder, and  
apply it dry to the Part affected ; for upon account of the Hu--  
mours, and Warmth of the Parts contain'd in the Mouth, a  
Putrefaction is soon brought on. For this Reason we are for the  
most part oblig'd to use the most forcible Medicines in Ulcers  
of this kind, such as may induce a Crust as effectually aS the  
actual Cantery. But those Ulcerations which arise on the in./  
ternal Surface of the Mouth, are call'd *Aphtha,* and are prin-  
cipally incident to Children. Moderate Astringents are gene-v  
rally us'd for the Cure : Sometimes also they grow inveterate,  
and in Process of Time hecome *of* difficult Cure, when they  
bring on a Putresactinn, or that Species of Ulcer by the *Grreis*call'd νομρὶ, from their spreading and consuming Nature. To  
such Children therefore, as can eat, 'tis proper in this Case to  
give Lentils with a little Bread, Marrow os Veal,, or of a  
Stag, and a small Portion of Quinces, or other Astringents,,  
such as Pears, Fruit of the Service-tree, or Medlars; and if  
*sraeApihtha* are inflam'd, Lettice must be put into their Victuals.  
But if theChild cannot yet eat, these Things must he given to  
its Nurse. It will also he proper to anoint the Children them-  
selves. If *ffiae Aphtha aaes* reddish in the Beginning, set such  
Medicines as are moderately cooling and- astringent, be apply'd  
to them;. then we are to use such Things aS digest without  
Pain Is the)’ are yellowish. Medicines os the same, but a  
more cooling Nature ; if they are whitish, and full of Phlegm,  
**absterging Medicines are** necessary ; if black, strong. Digee

stives. -But in Adults, and those, the Parts of whose Body are;  
of a harder Contexture, *JAise,* with a little astringent Wine,  
is sufficient. If the Ulcer is sordid, the *Misty* is to he mix’d  
with Mulsum. But in thofe *Aphthae* which require stronger Me- -  
dicines than the *Mise,* these may properly enough be levigated  
with Wine and Mulfum ;- for these are efficacious ingredients  
But of the middling Kind, especially in the Beginnings of theses  
Diforders, are Omphacium with Mulsum, and Rhus with the  
same: in very young Children, the Hower of Roses, or even  
dry’d Roses themselves, are sufficient *Qribastus de Loc.Affect.*

*Curat. L..su Cap.CS. : .. ." :*

Children are subjeft to a Species of Ulcer, which they mil  
Αφθαι, which is Sometimes whitish, sometimes reddish, and  
sometimes black. This Ulcer resembles a Crust, and is of a:  
very fatal and deadly Nature. In this Case, Iris, with Honey,  
is of Service; as also its dry Powder, blown upon the Part  
affected. Rose-leaves, likewise powder’d Rofe-flowets, Saf-  
fron, a little Myrrh, Gails, Frankincense, *Indian* Bark, (φλὀιὸς  
τί Λιβάνη) taken either with or without Honey. After these  
the Patient is to use Hydrornel, and the Juice of sweet Pom-'  
granate. *Paul. Acgineta, Lib.* I. *Cap.* Io.

The Causes of the *Aphthae* are, by *Actuarius,* said to he either  
when the Milk of the Nurse is too scanty, *or* when the Child  
itself cannot sufficiently concool and digest it. The Method of  
Cure proposed by him, is much the fame with that laid down-  
by *Oribastus,* from whom he only differs in a few trifling Cir-  
cumstances, not of Weight enough to lay a Foundation for  
pronouncing- the Cure of the one different from that of the  
other. *Actuar. Lib.* 6. *Col.* 3I8.

’ Those Pustules, accompanied with some Degree of Inflam-  
mation,. which appear in the Mouth, the Fauces, and CEfopha-  
gus of Children, are, by Physicians, call’d *Aphthae.,* and ate  
indeed nothing elfe than final! Ulcers, not exceeding the Bulk  
of a Millet or Hemp-Iced : These, notwithstanding their Small-  
ness, sometimes hecome so fiery and painful, as not only to ex-  
cite uneafy Sensations, and loud Shrieks, in the tender Patient,  
hut also render Suction of the Milk, and even Deglutition itself,  
difficult and uneasy.

There Pustules of the Mouth differ in Degrees ; for forne of-  
them ate without Pain, of a red or yellow Colour, and only  
dispersed here-and-there on the Surface of the Gums, the'  
Tongue, and Cheeks, and are therefore to be judged of a mild  
and benign Nature; whereas others are of a livid or blackish  
Colour, very painful, and *so* extended to the Uvula, Fauces,  
and CEfophagus, that the whole Surface of the Mouth often:  
appears to be one continued Exulceration ; and infixed these are,  
for the most part, of such a malignant Nature, - as to coofume  
and eat the subjacent Flesh to the very Bones.

The Matter exciting the *Aphthae* is of a highly acrimonious,  
penetrating, and caustic Quality. This Matter being originally  
lodged in the Blood, and, hv means of the Glands themselves,  
secreted in the glandular Covering of the Fauces, corrodes,  
inflames, and exulcerates the tender Flesh of the Mouth and  
Palate: Hence arise *Aphtha,* and all the various Train of  
Symptoms, with which they may possibly heppen to be compli-  
cated.

But among the more remote and less immediate Caufes which  
concur to the Generation of so virulent a Matter, we may,,  
above all others, reckon, first, the Milk either of Mothers or  
. Nurses, corrupted by an improper Regimen, by a Complication  
of Diseases, or the violent Sallies of turbulent and uneasy Pas-  
sions; and secondly, this fame Milk, coagulated in the Sto-  
mache of the fucking Children themfelves, and render’d impure  
and corrosive by an Admixture of the Rile ; for when such a  
Milk passes into the Blond, it cannot, in the very Nature of  
the Thing, fall to communicate a certain acrimonious Taint to  
its whole Mass, and lay a pretty sure Foundation not only for  
*Aphtha,* but also for several other Disorders.

As this is the Cafe, we have no Reason to he surprised, that  
*Aphthae* of various Kinds should generally either accompany or  
succeed those Diseases, which draw their Origin from an Impu-  
rity of the Blood, as is generally the' Case in acute and malig-  
nant Fevers, Coughs, choleric Diarrhoeas, Asthmas, difficult  
and painful Teething, and others of a like Nature , for, in Fe-  
vers, the Blond is, hy reason of its excessive Heat, for the most  
part, deprived of its mlld and gelatinous Part, and very easily  
,!ininres a fstine and sulphureous Quality; but in the other  
Distempers mentioned, a certain sharp and vellicating Matter  
is in the Faust; ane nor only excites Coughs, Diarrhoeas, and  
Asthmas, but is also fubjecti ro produce *Aphthae.*

Other external Causes also frequently concur to the Pro-  
duction of *Aphthae.,* and especially a Neglect of keeping the  
Tongue and h auces clean. the pernicious and preposterous Me-  
thod of curing Fevers, and other Diseases, by het Medicines;  
and exposing the Bodies of Children, when over-heated, to a  
cold Air ; which, by checking Transpiration, has an almost un-  
avoidable Tendency to accumulare and heard Up Mine and fid-  
phureous Sordes in the Masi of Humours. Nor ought wc. on  
this Occasion, to exolude other Cau ses which have an immediate  
and direol Influence on the lax Compages of the Fauces; such

as Crums of Bread, or Sugar; wrapt up in a Piece of Lined  
Cloth, in form of a Tent; as also a Piece of Bread dipp’d in  
Ale, and given to Children to he fuck’d. This Practice is not  
only followed by the lower Clast of our own Countrywomen,  
but *Lentilius* alfo, *Ephemeride German. Dec.* 3. *Arms* 3. *Appen-  
dice, Obf* 94. has taken Notice of its prevailing in a particular  
Manner in *Swabia,* and censur’d’ it with all the Bitterness it  
lastly deserves ; sor; partly by the strong Attrition of thefe Sub-  
stances, and partly by the Change induced on the natural State  
of the Saliva, the tender Cuticula of the Mouth is too violently  
actsd upon, and Pustulae are excited: But this Species of *Aph-  
tha,* unless an internal Acrimony of Humours concurs, is not  
only foon and easily cured, but has also given Occasion to Phy-  
sicians to attribute *Aphtha* either to an internal or an external  
Cause.

Thofe *Aphtha* which lie at considerable Distances from each  
other, on the Surface of the Mouth, are free from Pain, and  
of a red or yellow Colour, yield more easily to the Force of  
Medicines, than such as possess the whole Fauces, are of a  
blackish Colour, exulcerate deeply, and diffuse a foetid and dis-  
agreeable Smell. Neither is there so much Danger in those  
*Aphtha* which proceed from an external Cause, as in those  
which arife from one that is internal, and draw their Origin  
from a depraved and corrupted Sure of the Juices., such as  
those which fymptomatically accompany acute Fevers, and  
rorne other violent Distempers. Among the worst Kind of *Aph-  
thae,* we may justly reckon those attended with great Inflamma-  
tion, a Difficulty of Breathing and Deglutition\* which, in  
malignant Disorders, are generally bad Prognostics, and are,  
upon dissecting the Patient when dead, often found dispersed  
’ over the whole CEfophagus, to the Stomach itself.

The CURE.

The Cure *A Aphthae* varies according to thedifferentNatures  
of their productive Causes ; for if a depraved or corrupted Milk,  
either of the Mother or Nurse, is suspeited as the Cause, that  
Cause ought to be removed by correcting the Milk., which is  
most effectsally done by her abstaining from faline, acrid, spi-  
rituous, and acid Substances; hy her strictiy guarding against  
the Sallies of Passion, and using sirch Medicines as purify the  
Blond, and reduce it to a due Crasis: Of this Kind are **the**Decoctions of temperate, diaphorenc, absorhent, and gently  
purgative Roots and Herbs.

If, on the other hand, the *Fomes* of the Distemper is origin  
nally lodged in the Child itself, it is to he frequently purged, at  
proper Intervals, with due Dofes of Syrup of Manna, or Sue-  
cory with Rhubarb, and ply’d with fuch Medicines as prevent  
a Coagulation of the Milk, and correct its acrid *Dyfcrase.* Such  
Things, as, I have already raid, had a Tendency to produce the  
*Aphtha,* are at the fame time to be carefully avoided and  
guarded against. Then, for correcting the Acrimony of the  
Humours, Decoctions of Oats, mixed with Sugar-candy and  
Oil of sweet Amends, must be used. Decoctions ofTurneps,  
or common Carrot, must also he prescrib’d for the Patient’s  
ordinary Drink.

. It is likewise proper to allay the corroding Acrimony of the  
*Aphtha* by external Applications; for this Purpose we preserihe  
Linctirses, prepared of Diamoron, Juice of Porngranate, and  
Honey.; as also Juice of Turneps, incorporated with the Yolks  
of Eggs and Sugar; or Cream, mined with Syrup of white  
Poppies, the Yolk of an Egg, and a lithe Nitre, applied either  
with the Fingers wrapp’d in a Piece of Linen Cloth, or with a  
Sponge. The Yolk of an Egg also, incorporated with Rose-  
water and Sugar-candy, as allo a Mucilage of Quince-seed,  
mixed with Honey and a httle Saffron, afford a very consider-  
able Relief, if rubb’d on the Pustules. But I would not advise  
such Gargarisms as are usually prescrib’d for washing the Mouth,  
to he used for little Children, since they are entirely unqualified  
for doing what is requisite on ao Occasion of that Nature.

Those *Aphthae* which accompany acute or other Disorders,  
are never to be cured till that particular Distemper, whose con-  
comitant Symptom they are, is either allay’d, or throughly sub-  
dued and eradicated. Now, in acute Cases, the Workings and  
Efforts of Nature ought hy no means to he disturb’d by Purga-  
fives ; since the End is hetter answer’d by gentle Diapheretics,  
and temperatiog Emulsions, prepared of the Four cold Seeds and  
a small Quantity of Poppy-feeds. *Hoffman. Medic. Bjacicmal.  
Systemat. Vat.* 3.

*Viverius* recommends Narcotics in the Cure of the worst  
and most dangerous *Aphtha,* because they not only ease Pain,  
but prevent a Flukion of Humours to the Parts affeoled.  
“ Thus, says he, I myself snatched a Boy, of four Years *of*“ Age, from the very Jaws of Death, by giving him one  
" Grain of *Landanum,* when his Tongue and Mouth were  
" frill of deep Ulcers, accompanied with fuch a Degree of In-  
“ flammation, that he could neither swallow Broths, nor endure  
" the Application of Topics; when the Afflux of acrid Ha-  
" mours to his Mouth was so great, that they continually dri-  
“ veil’d from it in lame Quantities; and when he pass’d the

" Days and Nights in an uninterrupted Course of .Agony, add  
" Shrieks." *RiuercPraxes-Medo*

. A certain Woman was afflicted with-Very painfid and ohsti-  
: cate *.Aphtha,* -which .would- Treither yield to. Venesections,  
repeated Purges,, cooling Juleps,, nor anointing with the Spirit

1 Of Sulphur: She pass'd the Nights without Sleep; and could not  
eat without the greatest Difficulty, hecause her Mouth was full  
of little Ulcers. However, upon taking three Grains of Lau-  
danum, for three Nights successively, the acrid Deflaxion On  
the Mouth was stopp’d, andche *Aphtha* Cured in a few Days.  
*Riuerii Observat. Cent.* 3. —'  
) This Author gives an Instance of *Aphtha* bring produced j  
'the Stomach by a rash and unwary Use of Lemon-Joice.

*' From* **BOERHAAVE.**

*- Aphtha* are frequent in acute Diseases, attended with Instant- l  
mations of .some of the Viscera. These are small, round.  
'superficial' Ulcers, on the Inside of the Mouth; winch, upor  
an accurate Examination, appear to be Exulcerations of the  
‘ Extremities os the excretory Ducts of those Glands which fepa- vrate the salivary Humour, and convey it to the Mouth ; Now  
/when this Fluid is, by any Cause, render'd, too thick and viscid,  
it stops up the Extremities of these Canals, which, upon this,  
-exulcerate." .... ...

Every Part, therefore, into which such excretory Ducts dis-  
charge themselves in a natural State, are subject to *Aphtha\*,.as .*the Lips, Geuns, internal Parts of - the Cheeses, Tongue,  
'Palate, Fauces, Tonsils, Uvula, Throat, Stomach, and small

Intestines -

It is said, that the large Intestines, tho' rarely, are infested  
st with these small ExulcerationS; and that they are propagated

1 thro’ the whole Intestinal Tube. ν - -

The *Northern* People, who inhabit marshy Pisces, are most  
subject *to Aphthae* in a hot and rainy Season ; and Infants and  
old People are, in general, most affected with them. But in  
Countries which are warm or mountainous, orwhere the Air in  
habitually serene and dry, they are scarcely known. See  
**.ffiGYPTIA ULcERA. . . /**

*Aphtha,* in the Mouth, are usually preceded by a continual  
putnd Fever; or an Intermittent, degenerated into- a\* continual  
\* Fever, which began with a Diarrhoea, or Dysentery; a const-  
derableand perpetual Nausea, Vomiting, Loss of Appetite, and  
great Anxieties about the Praecordia, frequently returning; in  
greatWeakness, or any considerable Evacuation of the Humours ;

’ ‘by Stupor and Heaviness; by unequal, but perpetual, and not  
very violent Drowfiness ; ana by perpetual Complaints of a Sen- -  
sation of Heaviness and Pain about the Stomach: And it is  
remarkable, that those preceded by great Evacuations of the  
Humours are Very dangerous. . .

Sometimes, in the Beginning, a solitary Pustule will appear in  
different Parts of the Month; as upon the Tongue, in the  
Angles of the Lips, in the Fauces, or elsewhere, without any  
Certainty as to the Part on winch they first are visible; -and  
these are generally of a mild Nature. But sometimes they appear  
first at the lower Part of the Fauces, and a white, thick Crust,  
shining like new Bacon, which adheres firmly to the Parts, and  
ascends flowly, seems, as it were, to proceed from the CEsopha-  
Sis - These are usually a Very bed Sort, and generally fatal.

ut the worst Sort, and of which the Patient Very seldom reco-  
vers, are those which cover the whole Mouth, as far as the Ex-  
tremities of the Lips, with a hard, sum, thick, and tenacious  
kind of Crust. The two last Species should seem to have their  
Origin in the Stomach, and thence to ascendinto the Mouth.

The Malignancy of *Aphthae* may be estimated by their Colour.  
Thus those which are white and pellucid, and almost of the  
, Colour, of Pearls, are the least malignant; those which are  
white, but opaque by reason of their Thickness, are more so ;  
hut not so bad as those which are brown, yellow, or livid :  
The black are. Os all others, the worst.

When these *Aphthae,* or *Aphthoso* Crusta, have adher'd some  
time to the Parts affected, they begin to separate, and be loo sened  
from the subjacent Part, and to sail off, so that all the affected  
Parts are, by Degrees, and successively, freed from them: But  
this Separation is effected in some Kinds sooner, in others later.  
And hence also we may judge of the Degrees of Malignity; for  
the sooner the Separation happens, the less is the Danger.

Sometimes these, when fallen off, are immediately succeeded  
by fresh *Aphtha* but sometimes this Succession happens more  
stowly, and sometimes not at all: Sometimes also the succeed-  
ing *Aphthae* are as thick, or more so, than the first ; and hence  
also the Danger may be' estimated; for the sooner they are .  
Ienew’d, and the *thicker,* the greater is the Malignity. .

From considering what has heen premised, we may readily  
form an Idea of the Seat, Nature, Cause, and Symptoms of  
*Aphthae,* and of their different Sorts; and hence also their  
Effects may be understood.

Thus, if such an *Aphthose* Crust, aS is above describ'd, covers  
the whole Superficies of the Parts mention'd, all Sensation,  
which should he communicated to the Nerves, is intercepted,  
and the Patient loses his Taste. Besides tins, the Egress of the

Fluids, by these obstructed Emissaries, is-niteriy prevented ;  
the Consequences of which are, a Driness of rhe *Parts;' a Dila-  
tation* of the fubjaecht Veffeis, a Putrefaction of the Fluids,  
stagnating under *tiae Aphthose Griess,* and asiTnflammatiotr of **the**Parts themselves in which they stagnate. -. ' . . \*

Hence also the Orifices of the ahsorbentWessels are'chshuctil'  
ed in such a manner, that no fresh Chjde, Fluids, or.Medi-  
cines, can enter them; and this produces all these Disorders  
which may proceed froth a Deficiency of 'Nourishment and,  
in the End, Death. - r . . .

When these Crusts fail off, there is an increased Flux of Hu- -  
mours from the Months *of* the distended Vessels now opened j  
hence a. large Discharge of Salins, or a Dinrrhcea, which are  
good Symptoms, if the *Aphthosc* Crusts are not renew'd ; but  
had, if they are. . .. ... '

' Upon the Falling-off sof the Crusts, agreat Pain succeeds of  
the Parts underneath, which are now inflamed and exposed:  
These often discharge Blood, .whence bloody Saliva; and a'  
bloody Dysentery.

*' If* what has been faid is applied to the Stomach, theexcre-i  
tory Ducts of the Liver, Pancreas, and of the other Glandg  
which open into the-Intestines, we may form an-Idea of an  
infinite Number of Disorders arising from this Distemper; info-\*  
much that a farther Detail of the Prognostics wall he super-  
fluous. -

If these ulcerous Crusts are very stow, of Separation, thick,  
broad, and compact, .the subjacent Flesh, bring, as it were, fuf-ί  
focated, inflames, suppurates, or even mortifies; the Conse.

. rluences of which are malignant Ulcers, which sometimes affect  
*the Os Palati,* and its *Periosteum :* Hente we mayjudge of theif

. Effects in the Stomach and intestines. .

**I..... - . - CURE. \_ ? .**

I. The Impulse of the vital Fluids, upon the Parts afected;  
iis'to the -gently excited; and'so conducted, 'that, by a proper  
. Supply os Fluids, the ulcerous Crusta may he loofen’d; fepa-  
.rated, and fall off : This is effected *by* drinking great Quantities  
...os warm, diluting, resolving, and absterging Liquids. And  
hecause, in some bad Cases, the Orifices os the Lacteais are fo  
obturated as not easily to admit the Liquids thus taken. Fomen-  
tations, Vapours, and Baths, are of singular Use. The very  
hest Aliment is Bread heil’d in Water,land then mixed with.

. Wine and Honey.. . , .

Take of sweet Almonds blanch'd, two Ounces; of Pista-  
chio-nut Kernels, one Ounce ; of the Four greater and  
lesser cold Seeds bruised, each' three Drams; of excorti-  
cated Oats, three (Ounces: Boil these in a sufficient Quan- ‘

\*' \_tity of Water that two Pints of the Liquor may at last  
remain, in Ἀ close Vestel for ah Hour, and then add, os  
Liquorice-root, an Ounce, and let them boil -together **a**littie: Then let the boiled Ingredients be throughly bruised  
in the Decoction; and of this let the Patient drink sre-  
quently; and with this let him wash his Mouth: Or,

Take of the Roots of Carrots, Skirrets, China, Sarsaparilla,  
and Turneps, each four Ounces; of whole Parley, an  
Ounce : Let these Ingredients he well bruised, and boiled  
in Water; and, to thirty Ounces of the express'd Liquor,  
add, of Syrup of Marsh-mallows,-an Ounce. Let thin  
he used as the preceding.

Take of the Roots of Turneps unpar'd, a sufficient Quan.,  
tity ; let them be grated or rasped, and let the Juice he  
press'd, out; and, whilst it. is boiling, let it be despumated ;  
then, to sixteen Ounces of this Juice, add the Yolks of  
two eggs; and of Syrup of Violets, two Ounces. **Lef**the Patient take half an Ounce every half Hour.

The most proper Aliments, besides those mention'd hefore,  
are Decoctions of the farinaceous Vegetables.

2. The Crust must be disposed to separate soon and easily -  
which is effected by Fomentations,- Gargarlsms, and Clysters i x  
Thefe must consist of warm, relaxing, emollient, and deterg-  
ing Liquors, which moisten the Parts by adhering m them a  
sufficient time, and which resist Putrefaction. Thus,

Take of the ’Leaves of Mallows, Brank-urfine, Marsh-mal-  
lows, Pellitory of the Wall, Mullein, Mercury, Ladyss-  
mantle, each- two Ounces ; of the Roots of Marsh-mal-  
lows, an Ounce; of the Roots of Turneps, ten Ounces:  
To three Pints of the Decoction, made with Water, and  
express'd, add the Yolks of four Eggs; and Honey of  
Roses, two Ounces. With this int the Mouth be perpe-  
 tually washed, or gargled.

'Make-a Cataplasm of the. *Residuums* to he applied external-  
ly to the-Region of the Fauces, .

**Let Clysters also of inin Decoction be administer’d.**

3. As soon as the Crust is fallen off. It. will he proper to use  
anodyne and demulcent Remedies, and such as contribute **to**strengthen the relax’d Parts; Thus, ’

Take of Syrup of white Poppies, two Ounces; of Cream,  
two Ounces ; the Yolks of two Eggs; of Rose-water,  
two Ounces r Let a tittle of this he held continually in the

- Mouth. Os,

Take of the Jelly of Hartshorn, or of Flesh, made very  
thick, and cut into Slices, a sufficient Quantity: Let one  
' of these Slices he perpetually dissolving on the Tongue, and  
- so gradually swallow’d.

These two Medicines act agreeably upon the excoriated Paris ;  
and the following contributes to strengthen them,

-Take of the Decoction of the fresh Leaves of Agrimony,  
seven Ounces ; of Honey of Roses, an Ounce. Let this  
be applied perpetually to the affected Parts.. ‘

4. As soon as the FeVer is abated, a Sediment appears in the  
Urine, and the Pulse begins to he free, corroborating Medicines  
'are to he directed. Thus,

Take of the Root of the sharp-pointed Dock, an Ounce ;  
of the *Peruvian* Bark, and that of Tamarisk, each six  
Drams; of the Leaves of Agrimony, one Handful r Boil  
these Ingredients in a sufficient Quantity of Water, and to  
... .a Pint and an half of the Decoction add, of the Syrup of  
Kermes, an Ounce. Of this let the Patient take half an  
Ounce every Hour. Tins corroborates the relax'd Vessels  
Of the Intestines.

*Sydenham* advises in those *Aphtha* winch happen at the End  
of Fevers, together with Hiccoughs, to give an Electuary of  
- an Ounce of the Bark, made up with the Syrup of red Poppies,  
or in the Form of Pilis. Of this he directs the Patient to take  
one twelfth Part every four Hours, drinking after it a Draught  
of Whey ; and he says, it is the most effectual Remedy he has  
met with, provided the Virtues of the Remedy are not impair'd  
. by continually confining the Patient to his Bed.

5. At the End of the Distemper, some corroborating Purge  
should be administer'd. Thus,

Take of Rhubarb a Dram and a half; yellow Myrobalans,  
with the Nuclei, an Ounce and a half: Boil in a sufficient

’' Quantity of Water for three Ounces of the strain'd De-  
coction ; to which add, of Syrup *of Succory* with Rhu-  
barb twelve Drams. Make a purging Potion.

ss From the preceding History and Cure of *Aphtha,* many oh-  
scure practical Problems may be explained.

Thus, If a Reason should he required. Why, in a Fever,  
attended with a Diarrhoea Or Dysentery, *Aphthar* frequently ap-  
pear at the End of the Distemper ?. ...

It may he answer'd, Because the most fluid Parts os **the**Secretions are carried off, and only the most Viscid remain in  
- the excretory Vesseis of the Glands.

Why does this happen principally to Children and old Peo-  
ple ? -

. Because in Children the *Vires'Vita* are languid; in old Peo-  
ple the Juices are subject to Viscidities. ,

-. Why are those particularly subject to these *Aphtha,* who, in  
the Beginning of the Fever, have been treated with Medicines,  
Aliment, or a Regimen, winch are heating or astringent ?

Because Astringents brace np the Orifices of the excretory  
Ducts; and a *hot Treatment* draws off the thinner Parts of the  
z Fluids.

Why does a Purge, administer'd in the Beginning of such  
Distempers, Prevent *Aphtha ?*

Because by this means those Viscidities which stick in the  
Ducts, and cause *Aphtha* afterwards, are carried off

Why does a troublesome and fatal Hiccough frequently ac-  
Company the worst Species of *Aphtha ?*

Because, in tins Cose, the Stomach is cover'd with an *Aph-  
those* Crust, which sailing off, the Extremities of the Nerves  
are left bare, and are consequently easily irritated to ConVul-  
fions, and liable to Inflammation and Gangrene.

Why are *Aphtha* in the Mouth joined, by *Hippocrates,* with  
*loose Bellies, ussdi Prostration of Appetite?*

Because when the internal Coat of the Stomach is cover’d  
with *Aphtha,* there must he a Loss of Appetite, oraChylose  
Diarrhoea, because the Chyle. cannot enter the Lacteais; the  
Stomach is seldom affected with these *Aphtha,* but the intestines  
are so likewise. ’ ’ \* .

Why does an *Aphthose* Covering of the Stomach produce a  
Lientery?

Because no proper diluting Humour can he secreted in rhe  
Stomach, and therefore no Digestion can he performed, **and the**Aliment must go out of the Stomach as it enter'd.

Why are black *Aphthae* esteem'd satal ? .. \* i

Because they tend to a Gangrene.

Why do *Aphtha* in the Mouths Of pregnant Women presage  
a Miscarriage ? "sc sc- sisqusu

First, because they are Evidences of a considerable Viscidity,  
and perhaps Acrimony, of the Juices ; and secondly, hecause  
they prevent a due Supply of Chyle from enteringthe Lacteais ;  
both winch are Hindrances to the Nourishment of the Foetus.

Why are *Aphtha* frequent in Putrefactions of the Lungs,  
Liver, or other principal Viscera?

Because the putrid Matter convey'd from the Abscess of these  
Vifcera to the Blood, and thence to the Glands, impress upon  
the several Secretions an acrimonious Taint ; hence the Extre-  
mities of the excretory Ducts are corroded.

in a Consumption nothing is a more certain Presage of Death  
than these *Aphtha. .*

Why does a Tumor, Heat, Suffocation, and a Qpinsey,  
sometimes succeed a Refrigeration of *Aphtha ?*

Because by contracting the *Aphtha* and subjacent Parts, the  
*Aphtha* are prevented from falling off, and the Vesseis under-  
neath are obstructed ; hence the Parts swell, and are inflamed-  
And hence we may account for Debria, Anxieties, Want of  
Rest, and\* Cold Sweats, which frequently ensue, and prohe  
.Fatal. ,

Nothmg is more dangerous than to let cold Air, or cold  
Drinks of any Kind, be applied to these *Aphtha c* Some have  
died suddenly, who have held ColdWater in their Months, when  
they have had *Aphtha* there. v ' . τ

Upon the Whole, it may be laid down aS a Rule, that *Aph-  
this* which are pellucid, white,' thin, disseminated, soft, which  
easily separate without Renovation, and which are superficial,  
are of a good-Sort. -

On the contrary, those which are very white and opake,  
yellow, brown, or black, which are in great Quantities, thick,  
cohering, hard, tenacious, corroding, and which . perpetually  
repullulate, are extremely bad.

Dr. *Harris,* m his Chirurgica! Dissertations, disapproves Very  
much the Use of Spirit-of Vitriol, Ost of Sulphur, or burnt  
Alum, in *Aphtha , for* he says, these corrosive Applications  
will incline them to turn cancerous. Instead of these, he *ad-  
vises* a Decoction of Elm-bark with the Leaves of Sanicle, for  
aGargarism. . In .this he agrees with *Bocrhaave.*

*Dionis,* however, recommends Honey of Roses acidulated  
with Oil of Vitriol, aS a proper Mixture to touch malignant  
*Aphtha* with in Children. And *Sydenham,* in the Cose of a  
young Gentleman with *Aphtha,* consequent to the Iliac Passion,  
telis us, he used successfully the following Garg ar isrn:

Take of.Verjuice,, half a Pint; Syrup of Raspberries, an  
Ounce ; mix, and make a Gargarism.

And indeed the general Directions we meet with in Authors,  
with respect to *Aphtha,* are, to apply Remedies somewhat cor-  
rosive ; but I have taken the less Notice of these, because both  
Reason and Experience are on the Side of the contrary Me-  
thod recommended by *Bocrhaave* and *Harris.*

There , are some Empirical Remedies for *Aphtha* ; but none  
seems so Very extraordinary as that which consists in anointing  
the Crown of the Head with the best Oil of Bays, which is  
said to cure effectually the *Aphtha* of Children. This I had  
from a Physician of Veracity, who assured me he had frequent-  
ly been a Witness of its salutary Effects.

APHTHARTOS, ἄφθαρτος, from α .Negative, and φθ-sestes  
To corrupt. Incorruptible. *Castellus.*

~ .APHYA, APUA, ἀφήα, a small Fish. Hence ἀφυῶδες  
χρῶμα, in *Hippocrat. oreei* γυναικ.. *Lib.* 2. signifies a pale  
whitish Colour, like that of the Fish *Apua,* proceeding from a  
great Haemorrhage. *Galen'in Exeg.* See APUA.

APHYLLANTHES, άφυλλανθής, from α Negat, φήλλον,  
a Leaf, and ἄνθος, a Flower. It seems to signify an apetalous  
Flower.

APHYLLANTES' ANGUILLAR.il, a fort of Daisy.  
*Raii Hist. Plant.* See BELLIS.

APHYLLANTES MONSPEL. See CARYOPN YLLtISs

APHYSOS, ἄφυσος, ἄφυονος, from α Negative, and φυσάω,  
or φυωάω, to blow. Void of Flatulency, so ἄφυσος δίαίτα,  
*Galen, Lib.* I. *Cap.* 6. τῶν κατὰ τόπ. is a Diet that generates  
no Inflations. “ '

APHYTACORES, a fort of Trees, reported in *Pliny,*Lib. 3I. *.Cap. st.* to produce Amber.

APIASTRUM. See MELISsA. . ' - - τ

. APICES, [of *Apex,* a Top, or Point] those little Knobs  
that grow on the *Stamina* in the Middle of the Flower. They  
are commonly of a dark-purplish Colour, and have been disco-  
vered, by the Help of Microscopes, to be, as it were, a sort  
of Seed-Vessels, containing in them small globular or oval Par-  
ticles, of Various Colours, and exquisitely formed. They are  
by some supposed to be a kind of Male Sperm, which, falling  
down into the Flower, fecundates and ripens the Seed. *Millen's  
'Dictionary. ' \**

- APIITES, Perry, a sort of Wine shade os the Juice- os  
Pears. *Raii Hist. Plant,.* See **APITEs.'1 \*- ss**

- APINEL. This Root grows \*in some os the *American*Islands, and is by the native Savages' called *Yabacani* ; but by  
**us** *Apinesuroot,* from the Name os a Captain' os Horse, who  
served there for some' time, and first made the *Europeans* ac-  
quainted with it. '

- It is so efficacious against Serpents, that in. order to destroy  
them, nothing more is necessary then to thrust a Piece os st  
into their Mouths upon the Point os a Rod. Is a Person  
chews it, and besmears his Hands and Feet with it,- Serpents  
not only shun and sty from him, hut, what is more surprising,  
he may catch them without any Danger, and do with them  
whatever he has a mind. "Tis also observed, that these noxious  
and poisonous Animals will never enter a Chamber in which a  
Piece os this Root is kept. ' These Facts are attested by Ms,  
*De Hanteriue.-* This Root,, *so* useful for the Preservation of  
Mankind, would' also he beneficial for these Propagation, if  
that stood in need of forced Aids; which People in this Case  
are not much inclined'To use, since the End is sufficiently an-  
swered by instinct. *HisioirtidellAcad. IetA.'priQAn*

-- APIOS; Offim J.«B.'3. '666. Rali Hist. 2.\*87o. *Apios  
vera.* Ger.. 407. Emac. 504. *Apios sivegulfchias.* Chain 533.  
*Apiosusiue Tithymalus iuborosusgiPtPe..* Theat." I95. *Tithymalus  
tuberosus pyris.ormi radice,* C.B. Pin. 292. Tourn. Inst. her.  
Hist. Oxon. 3. 342. ROUND KNOBBED-ROOTED  
SPURGE. - r - -ss l'" γ

APIOS,.otherwise called *Ischias,.*Mountain or Wood *Cha-  
maebalanos,* and by some *Linorcastis,* shoots forth two or three  
needy,"slender, red Stalks, ‘which rise, hut little above-the  
Tlround.- The Leaves are like those of Rue, only more oh-  
-longand narrower. - It bears a small Seed; and its Root, which  
resembles that of Asphodel, is shaped much like a Pear, but  
rounder, and full Of Juice. The Bark is black on the Outside,  
hut white within. . - --

. Theupper Part Of the Root, taken, expels Phlegm and Bile  
by Vomiting, the lower Part by Stool; hut the Whole, taken  
together, purges both upwards and downwards. - If you desire  
so extract the Juice, cut the Roots in Pieces, and put them into  
a Vestel of Water ; stir them-about, and- take off the Liquor  
'that swims a-top with a Feather, and dry it. - Fifteen Grains  
of this, drank, will both Vomit and purges *Diofcorides, Lib.* 4.  
.Cby.iyy. -. . . ’ - -. *s ’ .-so -*

*Psiny* fays, the Root is like an Onion, but larger ; -and the  
-Pith of it is white,, but. the Bark black. \* They dig it in tho  
Spring, bruise it, and put it into an earthen Vestel, and throw-  
ing away what.swims a-top, the rest of the Juice purges up-  
wards and downwards, taken to the Quantity of fifteen Grains  
in Hydromel. The Measure of One-eighth of.a Pint is a  
Dose for hydropical Patients. The Powder of the dry'd Root  
is also given in a Potion. *Lib.* 26. *Cap.* 8.

It is a Species of Spurge, -ora Plant which sends forth many  
small and low Stalks, (lender, round, and reddish, lying often  
upon \_ the Ground; the Leaves are small, short, resembling  
those os wild-Rue, but less. " The Flowers grow at the Ex-  
tremity os the Stalks; they are small, form'd in the Shape of a  
Cup, cut into many Divisions, and of a pale-yellow Colour.  
When this Flower falls off, it is succeeded by a triangular  
Fruit, which divides itself into three Apartments, each of which  
incloses one oblong Seed; the Root is tuberous, and of the  
Figure of a Pear, more slender at the Bottom than at the  
Top, black on the Outside, and white within, full of a great  
deal of Milk. It is remarkable, - that when the Root is large  
and well grown, the Plant is small; but when the Root is  
fmall, the Plant is larger. It grows in hot Countries, and in  
mountainous Places. It contains a great deal of Essential Salt  
and Oil, mix’d with a large Quantity of Phlegm and Earth. ’

The Root Of this Plant works by Vomit, and by Stool, with  
Violence. They pretend, that the superior Part works upwards,  
and the inferior downwards ; but both the Parts of the Roof  
have the same Virtues. *.Lemcry de Drogues. -*

**APIOS,** a Pear-tree. *Oribasius, Aetius.* See **PYRUs.**

\* See .A.PES\* ’ . \* '

APITES, APITES VINUM, ἀπίτης, ἀπότης οινος, from  
ἄπιος, the Pear-tree, Perry, Wine of Pears. It is thus pre-  
pared: -

Take the Pears, which must not he very ripe, and cut them  
in Pieces, as you would Turneps, taking-out the Seeds;  
then put the Weight of eleven or twelve Pounds of them  
into ten .Gallons and a Quarter of Must, and let it mace-  
rate for thirty Days; after which strain it off, -and setIt  
aside for Use. ' . . - -

**It is thus otherwise prepared;**

a

Cut and pound the Pears, and having prefled out the Juice,  
with every twelve Pints thereof, - mix one Pint of Honey;  
and set it aside.

After the same Manner are prepared Wines inf Carol», Med\*  
lats, and Services. -. All these Rinds are astringent, have a grate-  
fid Sourness, and are good for the Stomach, and restrain inward  
Fluxes. *Diofcorides, Libi 5. Cass.* 32. . ί

l APIUM— Sinallage. *.. ...y. :*

The Garden Smallage is an Herb effectual for the same Pur-  
poses as Coriander, and, made into a Cataplasm with Bread,  
or fine Flour, is also good, for Inflammations os the Eyes. It.  
comforts a hot Stomach, and represses the Breasts .when, turgid  
with grumous Milk; it provokes Urine, whether;it be eaten  
boiled or raw.; The Decoction of the Herb and the Roots re-  
sists Poison, and excites Vomiting, but binds the Belly. The  
Seed is a more powerful Diuretic and Alexipharmic, ’relinVea  
-those who have swallowed Litharge, and is a good Carminatives  
It is an useful Ingredient, in anodyne and theriacal Remedies,  
and in such as are prescribed against Coughs, *soDiofcorides, Libs  
3. Cap. nA ♦*

- The Heleoselinum,. or Marsh--Smallage, that grows in  
watry Places, is larger than the Garden Kind, and useful for .  
the same Purposes. *Idem, Cap.* 75. . . r

The Oreoselinum (Mountain Pariley) shoots upifrom astender  
Root a single Stalk a Span thigh, which spreads: into littie  
Branches and Heads like Hemlock, but much flenderer, and  
bearing an oblong, stender, acrid; and fragrant Seed, like that  
of Cumin; it grows.on rocky and hilly Places, ssn'tss? ι  
. ' The Seed and Roos, drank in Wine, provoke Urine and. the  
Menses. It is mixed in Antidotes with other Ingredients of  
diuretic and heating Qualities. But wo must take-carer.not to  
mistake the *Oreoselinum* for the *Petrosclinum,* or what grows  
on Rocks; for the *Petrofelinurn*.in another thing. *Idem,*Capo foe. t-  
The *Apium* which they call *Petrofelinurn, grovrs in Macedo\*  
nia, on* craggy Places, having a Seed like Lishops-weed, but  
more scented, acrid, and aromatic, being a Diuretic, land Em-  
rnenagogue. It is good for the Gripes and Wind in .the Sto-  
mach and Colon, and for Pain? in-the Side, -ICidneysand Blad-  
der, heing taken io a Potion. It is mixed with other Diuretics  
in Antidotes. *" Diofcorides, Lib'.* '3. *Cap. IT. ~*ἱ  
*' Hipposelinum* is by some called *Grielurn,* by others *Agrioseli.  
num,* by others *Smyrnium,* though the proper *Smyrniurn* be. an-,  
other thing. It- is larger and whiter than the Garden *Apium,*with a tall, hollow, tender Stalk, distinguished, as.it were, by  
Lines. The Leaves are larger, inclining to a ScarletjtheTops  
of the Branches are like those of Rosemary, and laden with  
Flowers,- which form themselves into an Umbella. The Seed  
is black, oblong, solid, acrimonious, and aromatic. The Root\* ’  
is sweet-scented, white, and of a grateful Taste, not thick in  
Body. It grows in shady Places, and by the Sides os Marshes,  
and is eaten like Smallage and other Greens. The Root is  
eaten either raw or boiled, and the Leaves and Stalks dressed  
either alone or with Fish; they are also pickled raw..

. The Seed, drankin *Mulsuni,* provokes the Menses; and, used  
either in a Potion or Litus, warms those who shiver with Cold,  
and helps the Strangury. - The Root works the same Effects.  
*Diofcorides, Lib.* 3. *Cap.* 78. - s

*‘ Apium* is an Herb mightily in Request; its Branches, .in great  
Quantities, swim in our SoopS, and have a peculiar Grateful-  
ness in Pickles. Besides, is it be made into a *Litus* with Ho-  
ney, and the Eyes anointed therewith, so that they may be now-  
and-then fomented with the warm Decoction of the fame, it  
gives wonderful Relief in Defluxions, and also in Rheums on  
other Parts, if it he bruised and apply’d alone, or with Bread,  
Or Polenta. Fishes, when sick in Ponds, are recovered with  
green *Apium.* But among the Knowing, there is nothing  
dug out of the Earth, that has heen the Subject os a greater  
Variety of Opinions. It has a Distinction of Sexes. *Chry..  
sippus* telis us,. that the Female has crisper Leaves and hard,  
with a thick Stalk, and a hot acrimonious Taste. *Dionysius*says it is blacker, has a short Root, and breeds Worms: Both  
these Authors agree in making it forbidden, and altogether  
unlawful to be eaten, as heing appropriated to funeral Feasts,  
and also hurtful to the Sight. The Stalk of the Female, they  
say, breeds Worms, for which Reason those who eat of it, of  
either Sex, hecome barren; and that Children, suckled by Wo-  
men who eat it, become affected with the Falling Sickness. '  
The Male Kind, they grant, is more innocent, and therefore  
it is not condemn'd with the other forbidden Plants.

‘ TheLeaves, apply'd, mollify the Hardness os the Breasts; and,  
heiled in Water, make it more grateful to the Taste. The  
Juice, especially of the Root, drank in Wine, mitigates Paine  
of the Loins ; the same, instilled, helps Thickness of Hearing.  
The Seed provokes Urine and the Menses, and brings away the  
iSecundines.-. The-Decoction of the Seed takes away the Marks  
of Blows, if the Parts be fomented therewith. Mede into a  
*Litus* with the White of an egg, or the Decoction of it in  
Water heing drank, it cure Disorders of the Kidneys. Bruised  
in cold Water, it heals Ulcers of the Mouth. .The Seed, drank  
in Wine, or the Root in old Wine,'breaks the Stone in  
the Bladder; it is also given in.Winte Wine to those.who are  
affected withuthe Jaundice.

*- Diufairunt,* otherwise called *Hipposelinum,* is good against **the**Poison of Scorpions; the Seed, drank. Cures the Gripes; and **the**Decoction thereof in *Mulfum,* being drank, relieves under **a**Difficulty of Urine. The Poos, boiled in Wine, expels **the**Stone, and mitigates the Pains of the Sides and Loins; heing  
drank,~chd the Parts anointed with the fame, it cures the Bite  
of a mad Dog. The Juice, drank, warms those who shiver  
with Cold.

. Some make a fourth Blind, called *Oreofelinum,* which is an  
upright Plans, a Span high, and has a Seed like Cumin, which is  
effectual in provoking Urine and the Menses. *ThtHileoselinum*has a particular Virtue against Spiders ; and Women take the  
*Oreofelinum* in Wine, as an Emmenagogue.. *Pliny, Lib.* 20.  
Cap. II.

. Another Kind grows On Rocks, and is by some called *Petro--  
felinum.* It has. a peculiar Efficacy in an Abscess, if to two  
Spoonsuis of the Juice you add One-eighth of aPintofJuiee  
os Horehound, and three times that Quantity of warm Water;  
Some add *Bufelinum,* which differs from the Garden Kind in  
the Shortness of its Stalk, and the reddish Colour of its Root ;  
hut has the same Virtues, and is a powerful Remedy against  
the Bites of Serpents, either drank. Or used as a LituS. *Idem,  
Cap.* I 2.

l *Apium* is of all Garden Herbs the slowest in shooting out of  
the Ground, not appearing hefore the fortieth Day when  
Quickest, but generally not before the .fiftieth Day.. *Idem,  
dby sm. Cap.* 7. It is sown aster the Vernal Equinox, the Seed  
being first a little bruised in a Mortar, which, they fancy,  
makes it the more crisped, as well as when, after sowing, it is  
pressed down with a Roller, or the Feet. It. has a peculiar Pro-  
perty of changing its Colour. In *Achaia* it has the Honour  
to crown the Conquerors in the sacred *Nemean* Games. *Idem,  
Lib.* 19. *Cap.* 8.

.. This is the Account given Of the different Sorts Of *Apium*by the AntientS. Bur *Mellor* enumerates thirteen Species.

*. Dale* mentions six Sorts of *Apium* used in Medicine. The  
first is the'

APrUM ET **ELEOSELINUM,** Offic. *Apiumvulgare siue pa.,  
lustre,* Mer. Pin. 9. Park. Theat. 296. *Apium vulgare ingra-  
tius,* J. Β. 3. Ioo. *Apium palustre Heleofelinum,* Chain 396.  
*Apium palustre sive Officinarum,* Rail Hist. I. 447. Synop. 3.  
2I4. *Apium Officinarum sive Paludapium,* Merc. Bot. I. 2o.  
Phyt. Brit.. q. *Apium palustre, et ApiumOfsicinarum,* C. B.  
Pm. I54. Tourn. Insh 3O5. Elem. Bot. 254. Boerin Ind.  
A. 58. Hist. Oxon. 3. 293. Rupp. Flor. Jeo. 22o. *Apium  
palustre Paludapium dictum,* Mor. Umb. 2I. *Eleos.elinum,seu  
Paludapium,* Get. 862. Emac. I0I4. SMALLAGE.

The Roots of Smallage are about a Finger thick, wrinkled,  
and finking deep in the Earth, of a white Colour, from which  
spring many winged Leaves, somewhat resembling Parfley, but  
are larger, of a- yellower Colour, each single Leaf heing some-  
what three-square; the Stalks grow to he two or three Foot  
high, smooth-chanelled, and somewhat angular, and Very much  
branched ; at the Division of the Branches, come forth Umbels  
of small yellowish Flowcrs, followed by Seed less than Parfley-  
feed, paler and hotter. The whole Plant is of a strong un-  
grateful Savour. It grows in marshy watry Places, flowering  
and ripening Seed in the Summer.

- The Roots, Leaves, and Seed, are used.

The Roots are diuretic, .and Very good for the Stoppage os  
Urine, the Stone and Gravel, and open Obstructions of the  
Liver and Spleen, and help the Dropsy and Jaundice, and re-  
move Female Obstructions. The Leaves are of the same Na-.  
ture, and are one of the Herbs which are eaten in the Spring,  
*to* sweeten and purify the Blood, and cure the Scurvy; the Seed  
is het and carminative, and is one of the Four lesser hot Seeds,  
as the Root is one of the Five Opening Roots. *Mellen Bet.  
Gsse . A. ‘ ’*

*Cordus* justly observed, that the *Apium fastuum,* which is our  
*'Celeri,* did not differ from the Smallage, any otherwise than  
by Culttire. This Plant is bitter, acrid, and aromatic. It  
contains a great deal of oily Volatile Salt, from which the Sal  
Ammoniac is not quite disengaged, but dissolved in a great deal  
of Phlegm, and united with a great deal of Earth. By the  
Chymical Analysis, it yields, beside several acid Liquors, a  
great deal of Sulphur and Earth, a pretty deal of an urinous  
Spirit, anda littie concreted Volatile Salt. Thus it is no Wonder,  
that this Plant should he Aperitive, Diuretic, Febrifugous, and  
Vuinerary. Six Ounces of the Juice of its Leaves, mixed with\*  
two Ounces of the *Peruvian Bari,* **is a** Certain **Cure** *for* **a**Cluartan Ague, and wheresoever there are Obstructions in **the**lower Belly. In the Scurvy, the Juice of Smallage is no less  
efficacious than that ofScurvy-grass, to strengthen the Gums,  
and cleanse the Ulcers of the Mouth. Cancerous, and Other  
Ulcers may he bathed also with it. The Root is made use of in  
Aperitive Ptisans, Decoctions, Apoaems, and Synrps. To  
draw the Milk, boil equal Parts of the Leaves of Smallage and  
Mint in Whey; strain is, **and sprinkle it. with** Smallage-seeds  
Powdered. *Martyn’s Tournescri. . ' '*

*PartirolomAeus Zorn,* in his *Botanologia,* says, that it grows  
naturally in moist, marshy, and shady Places. It is also planted  
in Gardens, where It is known under the Name Of *Sallary.*Both the Seeds and Roots are used, especially in Obstructions  
Of the Liver and Spleen; they warm, dry,.Purify, and atte-  
nuate ; they occasion a Discharge of the Urine and Gravel, pro-  
yoke the Menstrual Evacuations of Women, and carry off Fe-  
vers, Jaundice, and Dropsies; but they are Very improper for  
such as are subject to the Falling Sickness, by reason os some  
particular Quality, as *Simeon Sethi* informs us. If Women with  
Child use them, they bring forth Monsters; and the Children  
which suck of them, contract the Falling Sickness, if we may  
believe *Pliny.* Its Root, hung about the Arm, by way ofAmu-  
let, removes Tooth-achs. *Melch. Scbitz. Disc, de Denti- \*  
Eus, An* I86. The Herb itself, and its Root attenuate and  
dissolve the Milk coagulated in the Breasts Of Women, and  
dissipate its superfluous Quantity. For this Purpose some add  
*to* is Mint, Coriander, and Cumin. The expressed Juice of  
this Herb, mixed with Honey of Roses, is said to be an excel-  
lent Deterger of Wounds and Ulcers.. See *Franc. Faleriola,  
0bs.* I. *Lib.* I5. Some Surgeons order it to he mixed with  
Medicines designed for dressing Cancers, and other malignant  
Ulcers. si '

The .only Shop Composition .which takes its Name from  
*Apium,* is the ------ - -

**MUNDIFICATIvUas EX APIO.**

*The cleansing Ointment with* **SMALLAGE.c . l - -**

Take of the Juice of Smallage, one Pint.; of Honey, nine  
Ounces ; of Wheat-flower, three Ounces. Boil than  
till they grow thick: together, of the Consistence of an  
Ointment, *S. Ac si''*

This hath pass'd through all the College Dispensatories exact-  
ly the same; but I have never known it prescribed or made,  
*spuincs.s London Dispensatory.*

The second Species of *Apium,* mention'd hy *Dale,* **is the**

**PETROSELINUM vULGARE,** Offic. Park. Theat. 922.  
*Petrofelinurn,* Ejusil. Pared. 49I. *Apium hortense.* Ger. 86I.  
Emac. Io I 3. Ran Hist. I448. *Apium hortense, serve Petro fe-  
linum vulgo,* C. B. Pin. 153. Tourn. Insh 305. Elem. Bot.  
254. Boerh. Ind. A. 58. Rupp. Flor. Jen. 229. Hist. Oxon.  
3. 292. *Apium hortense multis, quod uulssb Petrofelinurn palata -  
gratum,* J. Β. 3. 97. *Apium, Selinum, Petrosclinum,* Chain  
396. *Apium suctuum 'vel hortense, vulgatius latifolium planum.*Men Umb. 22. PARSLEY, μά ’ ss

The Root of this is one of the Five opening Roots.

Of this sort of *Apiurn* there are a great many Species. They  
are all esteem'd opening, attenuating, diuretic, and useful sor  
Obstructions of the Liver and Spleen; help the Jaundice, pro-  
voke Urine; and are of Service against the Stone, Gravel, and  
Strangury. *Miller. Bos. Off.*

A distill'd Water of *Parfley,* which partakes Of the Virtues  
of the Plant, is directed by the College to. he kept in **the**Shops. .si

The third *Apium,* taken Notice os by *Dale,* is the

**APIUM PYRENAICUM THAPSIAE FACIE, Tourn. Irish.**3O5. Boerhs Ind. A. 58. *Seseli Pyrenaicum Thapsia seism,*Pluk. Aimag. 344. Ran Hist. 2. I808. *Seseli Pyrenaicum  
Thapsia facie,* D. Fagon. Schol Bot. I6I. Parad. Bat. 229.  
*Selinum Pyrenaicum, lobis foliorum acutioribus,* Vaill. MOUN-  
TAIN PARSLEY, or THE SECOND BASTARD TUR-  
BITH. ’ ..... .. - . --

It grows on the *Pyrenean* Mountains, and the Root is in Use,  
winch serves the *Spaniards* instead os the Root of Turbith, as  
*Chomelinus* affirms ; but it is Of a noxious Quality. *Dale.*

The fourth is the

BUNIUM, Offic. *Bunium Dalechampii, J.* B. 2. 29. Chain.  
385. *Daucus Petroselini vel Coriandri folio,* C. B. Pin. I5o-  
*Daucus Petroselini vel Coriandri solio, seu Bunium Dalechampii,*Park. Theat. OOO. Rasi Hist. I. 449. *Saxifraga montana minor  
Petroselini vel Coriandri folio.* Hist. Oxon. 3. 274. WILD  
PARSLEY. s'\*

... It grows in stony and nigged Pisces» end flowers.sh the Sum-  
mer. The Herb is used, and is diuretic, heating, and. brings  
away the After-birth: It is good for the Spleen, Kidneys, and  
Bladder. *Dale.*

**The fifth is the - .**

**PETROSELINUM MACEDONICUM,** Offic. *Petrofelinurn  
Macedonicum verum.* Ger. 864. Emac**. IOI6.** *Pecroscelinum  
Macedonicum quibusdam,* Parle. Theat. 924. *Apium Macedo-  
nieum,* C. B. Pm. I5am Tourn. Inst. 305. Elem. Bot. 254-  
Ran Hist. 1. 463. Hist. Oxon. 3. 293. BoerlL Ind. A- 59-  
*Apium siue Petrofelinurn Macedonicum muliis,* J. B- 3. JP2'  
Chain 397. *Apium semine villose situ incano, Macedonicum,* Mor.  
**Umb. 2I.** *Daucus Macedonicus Apii folio,* Herm. Flor. *Zoftfoe*MACEDONIAN PARSLEY, ' ~

V It is cultivated in the Gardens of rhe Curious, and flowers in  
*July.* The Seeds are stnall,-hairy, striated, of a'very dark  
Green, of an acrid and aromatic Taste,’ and of a fragrant  
Smell. - - - --- - - - . .....

It is "principally used as a Diuretic and Emmenaaogue, and  
sometimes as a Remedy against Diseases caused by Witchcraft.  
*Schroder.* Some conceited Preparers of Medicines have been so  
ill advised, as to rejost this Simple in the Composition of the  
*Tberiaco,* &c. as *Volckamerus* observes, and in its stead to substi-  
tute the *Smyrniiim perfoliatum Creticum,* or *Olus atrum [Alex-*andersl; which will by no means enswerthe Purpose. *Flor..*Hint. 325. - *'Dale: - . .*

- The sixth is the . , . . '

SELtNUM MONTANUM, Ossie. *Selinuin seve Apium peregri-  
num,* Park.Theat. 928. *Apium peregrinum, follis subrotundis,*C. B. Prod. 3i. Pin. I 54. Hist. Oxon. 3. 293. *Apium semine  
villose incana, peregrinum primum Clasts, ^'larcsstnb. 21. Vise  
naga minor qusriindam, Selinu.m peregrinum Clasti, semine hirsu-  
te,* J. Β. 3- 94. *Daucus tertius Diofcoridis,* Rasi Hist. I.  
.4.62. *Daucus peregrinus, foliis subrotundis pinnatis* Herm. Flor.  
2. I7.-- STONE PARSLEY. ’ ' '

It is sometimes found in the Gardens of Botanists. The Seed  
is tiled, and is supposed to have'the same Virtues as the former.  
*Dale.*

*Bartbolomaeus Zom* mentions a Sort *of Apium,* under the  
Name of - -- '

*Aplam selvestre, Alfnicium dictum,* Ofiicin. *Apium splvestre.*Doth *Thscsselinurn quorundam, planta lacteo succo turgens, locis  
humidis proveniens,* J. R - *Thyffelinum Plinii,* Lob. *Olsenp.^.  
ehiium.* Cord: Thai: *Olsisitiurn,* Tab: *Apium sesuestre lacteoi  
succo turgens,* C. B. *seieurn Silesia cum palustre,* Schwenckst  
*Daucus palustris,* Gesn. H. *Cuminum alnorum.* Ah

*Dale,* amongst other Symcnorna, calls it OELNIzIUM, Ossie.  
Germ. . - -

This Plant is very little known in our Shops ; but is much in  
.Vogue amongst the *Germans. - - . - -*

- -This Heth grows in moist and shady Places, and especially  
near,the Roots of Alder-trees. In Pharmacy its Root is princi-  
pally in Ufe, which, if gather’d in the Spring, smells pretry  
strong, and is of a sharpish bitter Taste. It opens the Pores,  
dissolves, attenuates, and expels malignant Humours by Sweat.  
It carries off Pains in the Stomach and Belly, clears the Breast  
of Deductions,- eases Coughs, occasions a Discharge of Gravel,  
and resists the Plague, -contagious Fevers, and other virulent  
Disorders. It is also successfully used against the Bites of poi-  
sonous Animals. See *Leon Tbunieijser Histor. Planta. Cap.* I4.  
*Case. Sclnuenckfolt. Descript. Thermar. Hirsehbergcnse Ed. Gor-  
lic.* I607. *Mich. Crugner. Chym. Garten. Baw. C. ay. Matth.  
Place. Tri German, de Peste, P.* 2. *C.* I3. *Ed. Witt.* I566.  
*A. Q. Rsuin. Dissert, de Lipstcnst Pest. Ed.* I68o. *Thomas  
Reinese Tract. German, de Pest. p. .jet. Edit. Altene.* I68I.  
The Root has by some heen taken for the true *Meurn of the*Antients. *Barthslemai Zorn Botanologia.*

. APLESTIA, ἀπληστία, from Λ Negative, and πληθω, to sill.  
'Insatiableness. A Vice opposed to ἀιντάρκεια. Contentment in.  
the present State. *Galen, de Dign. et Cur. an. Moria C.* 9.

APLEUROS, άπλευρος, from α Negative, and πλευρὸν. a  
Rib.- Wanting Ribs. *Galen. Lib. 4. de Hippocr, et Plat.  
Deer. C. 4. . ......*

APLYTOS, απλυτος, from α Negative, and πλὑνω. to  
wash. Unwashed,- an Epithet of Wool, which is otherwise  
call’d, in *Latin, Lana succida,* and by *Hippocrates* ἱιρίοες ἀπλυ-  
τον. - - - ' .'

APNEUSTI, απνευστι, from α Negative, and πνεὑω. to  
breathe. - Without fetching Breath ; Κέλευε ἀπνευστἰ τοῦτο πιοῦν.  
“ Order him to drink it off at one Draught, or without fetch-  
" ing Breath.” *Hippocrates de Intern. Affect.*

APNOEA, ἀπνοια. a Delect of Respiration. Ἀπντςἀναπνοὴ,  
\*\* .a Respiration without Breath,” is spoken by *Heraclides* in  
*Galen, Lib.* I. *deDioffic. Spir.* of a Respiration in thofe who  
are refrigerated, which is fo small, rare, and flow, that it seems  
to be in a manner extinol, and is such an ἀπνοια as happens in  
a Strangulation of the Uterus, the Apoplexy, and Lethargy,  
being a Consequence of a Resolution of the Organs of Respira-  
tion. - - .

*- Diogenes Laertius* informs us, that *Empedocles,* the most cele-  
brated of all the Disciples of *Pythagoras,* acquired an uncom-  
mon Share of Reputation for curing a Woman who was taken  
for dead ; when, according to that Philosopher, she only labour’d  
under a Strangulation of the Matrix. He gave the Name ἀπνους,  
which implies *without Respiration,* to this Disorder ; and main-  
tained, that a Patient might five thirty Days under it.

*Heraclides of Pontus,* a Philosopher who studied some time  
under *Aristotle,* and then under *Speujippus* the Disciple of *Plato,*wrote, among other Things, a Treatise περὶ τοῦ *deer\*,* or *concern,  
eerning the Distemper in which the Patient is deprived of-Respi-  
ration,* in which he alfo asserted,- that the Disorder might con-  
tione for thirty Days, during which time rhe Patient remained  
without Respiration, and appear’d dead, without any Danger of  
the Body’s corrupting.

APOBAEN0N, ἀποβάῖνεν, from άποβαἰνω,ϊο happen. An  
Event. :' . - ' ' . ' . . X-"-; - ~

APOBAMMA,' ἀπὄβαμμα, from ἀποβάπτω, to tincture  
slightly. The same as *Embamma, a* flight Tinciure, and com-  
monly applied to Licjuor in which Gold Coins, or red-hot Irons,  
heve heen quench’d. *Castellus. - . . e.. . ..*

APOBRASMA, ἀποβροσμα, from ἀποβρασσομαι, to ejacu-  
culate, or ejecI in AEstuation, *Hipp, de Natura Puere.* The  
Bran of Wheat , or, according to others, the Froth of the Sea.  
*Foestus. Castellus. . ... - ‘ . .. .*

APOBREGMA, ἀποβρεγμα, from ἀποβρέχω, to diluto. A  
Dilution. ... ' ...

APOCAPNISMUS, ἀποκαπνισμὸς, from ἀτοκαπνίξω, ,to  
suffumigate. A Sussumigation. See SUFFIMENTUM- - -

APOCARTEREON, ἀποκαῥτερέων, in *Hippocrates de Rat.  
Vict. in Moria acut. is* one that starves himself to Death:  
Ἀποκαρτεροῦο ἑαυτὸν λιμω η ἀγχονη του βίου έξάγειν..-1\* Ἀποκαρ-  
"." τεροῦν -is to force one’s fess out of Life by Famine or Stran-  
"" gling.” *Suidas. Foestus. '* i . - -

APOCATASTASIS, ἀποκατάσταονς, from ἀποκαΑίστημι, to-  
rosiore. A Restitution, Amendment, Subsiding, Cessation. . Iri.  
there various Significations the Verb is ufed by *Hippocrates mi*many Pisces of his Works., and in *Aretaeus, Lib.* I. *Cop.* Io.  
*τΜνάξ.*παθῶν,.the Word ἀποκάτάσταοίς imports an intire Restitu-  
tion to the former sound State. - ,

" APOCATHARSIS, ἀπονὰδαροις, from ἀπον.αβαἰρω, to cleanse  
or purge. An Expurgation. Ἀποκαδο'ρεθ-αι, or ἀποκαβμόρειν,..  
are ufed by *Hippocrates* to express the Evacuation of Pus from;the Breast by Spitting. Ἀποκμόάρσεις χολοῦς, in *Thucydides,.Lib.*2. are those bilious Vomitings and Purgations, which affected-  
the Patients in the memorable Plague of *Athens. \_*

APOCENOSIS, άποκένωσις. The same aSABEvAcUATIo,  
which see. -

APOCERUGMA, ἀποκήρυγμα, from ἀποκηοὑί,ω. to deciare.  
publickly/ A Declaration. Ἀποκηρὑγματα. in *Hippocrates,*are such Declarations or Indications as are thought proper to he-  
made to the Patient.

APOCHOREON, ἀποχωρέον; from.ἀποχωρέω, to secedo.  
Excrement in general, or whatever is discharged from the Body,  
by Stool or Urine.

APOCHREMPSIS, ἀποχρεμψις. A Hauking up of Spit..  
as *Apocbnemma, duro-ggip-fco,* is the Matter or Spit thus eva-  
cuated. *Hippocr. Coac, et de Locis in Homine. -*

APOCHYLISMA, ἀποχὑλισμα. The *Juice of-Vegeta-  
bles* extractsd and inspissated, answering to the officinal Word  
*Rob. Castellus.*

APOCHYMA, ἀποχυμα. is that Kind of *'Lapiscsa* which is  
made of the Resin and Wax that are seraped from Ships: So  
*Aetius* understands it; but some will have it to be the Resin of  
the Pitch-tree. *Qribaseus*. prepares it in the following man-  
ner; ' ' - *s - - .*

Take of dry Pitch, one Pound ; Tar and Wax, each four.

- . Ounces; Resin of-the Pine-tree, six Ounces. After  
they are all melted and strained, they are thrown into W  
Pall full of Sea-water, or common Water, and worked  
with the Hands after the Manner of Troches. It is of a  
very mollifyingQuallty. See Zopissa. -:

APOCLASMA, ἀποκλασμα. The same as ApAGMA, or  
ABDUcTjo, which see. It is also called ἀπΌκεκαωλισμένον. thet.  
is, when a Bone is broken καυληδὸν. as the *Greeks* fay, or aster  
the Manner of a Stalk (καυλὸς), neartheJoins. . ..

APOCLEISIS, ἀπὄκλεισις, from άποκλοῦω, to exclude. An-  
Exclusion ; but, in many Places of *Hippocrates,* the Verb  
whence k derives its Signification, is used to express a Loathing  
and Aversion to Food.

. APOCOPE, ἀποκοπὴ, from ἀποκύστω, to cut off. Abfcis.  
**sion., SeeABSCISsIo. . -**

APOCRISIS, ἀπὄκριΛς, *in. Hippocrates,* is the fame as *Eccri-  
fis,* ἔκκριοτς. Whatever excrementitious or redundant Matter is:  
discharged out os the -Body, *in Lib. aesei* ενυπνίων, ἀπὄκρισις:  
signifies a secreted Matter, that is the Caufe and Support of a.  
Disease. In the same Treatise it often signifies a Secretion of  
the Food, and Distribution of the Aliment. Ἀπὄκειονς νοσερὴ,  
in the fame Author, is a pestiferous Vapour, Exhalation, or.  
unwholsome Quality impress’d onthe Air.

APOCRUSTICON, *d'zrox.sxs-siiir,* from *dsroxdur. to repel.*An Epithet for a Remedy of a repelling and astringent Quality. .  
*Gal. Lib. si. Meth. Anca. I 5. ,*

APOCYESIS, ἀποκἄκσις, from ἀποκυέω. tn bring forth  
Young. Α Birth. *Gal. Lib.* I. *de Cause. More. Cap.* 7.

APOCYNON, called alfo *Cyrurnchon, Pardalianches, Cyno~-  
mersn,* and *Cynocrambe,* is a Shrub with long flexible Branches,  
that are difficult to he broken: The Leaves resemble those of  
Ivy, but are foster, and sharper pointed, strongly scented, some-,  
whet viscous, -and full of a Honey-like Juice. The Fruit runs  
out, like a Bean-cod, a Finger in Length, of a capsular Form,  
containing stnall, hard, black Seeds.

The Leaves, mix’d with Meal, and made up into Loaves, kill  
Dogs, Wolves, Foxes, or Panthers, that eat of them, and  
immediately affect their Hips with a Palsy. *Dioseorides, Lib.  
An Cap.SIi, ... ...*

The Seed, , drank in Watch, cures the Pleurify, and all man-  
ner os Pains in the Side. *Pliny, Libi* 24. *Cap.* II.

*Dale* takes Notice of two Sorts of the **APOCYNUM.** The  
first is the

**APOcYNON SYRIACUM,** Ossie. Mont. 37s *Apocymum AEgy-  
ptiacum, lactescens siliqua Asclepiadis,* C. B. Pin. 3O3. *Apocy..  
num erectum incanum latifosium Asgyptiacum,floribus croceis,* Pat.  
Bat. 27. Tourn. Irish 9I. *Apocynum crectum. majus latifolium  
AEgyptiacum,store luteofpicato,* BreyrL Prod. 2.. I 4. Plult. Almag.  
34. Hist. Oxon. 3. 609. *Apocynum AEgyptiacurnfloribus, spica-  
tis,* Elem. Bot. 78. *Apocynum Syriacum Colasii,* Rafi Hist. 2.  
IO88. *Beidelfar ofsiar,* Alpin. Aigypt. 85. *Beidelfar Alpini five  
Apocynum Syriacum,* J. B. 2. I 36. *Apocynum Syriacum et  
Algyptiacum, Beidelfar Alexandrinum Alpini*,Chain 119. *Ofsiar,*Hon. Belli Epist. *ad Clusium,* 3O6. DOGS-BANE.

I find no Virtues attributed to this Plant, except those taken  
Notice of from *Dioseorides* and *Pliny,* which are transcribed by  
*Galen,* and all succeeding Authors.

The second is the

PSEUDo-IPoCAcuANNA FUSCA, Ossie. *Apocynum crectum,  
folio oblongostore urnbellato,petalis reflexis, coccineo, Cat.Jam.* 89.  
Hist. I. 2O6. Tab. I29. Ran Hist. 3. 537. *Apocynum Curasc  
favicum, fibrosa radice, floribus Auraatii, Chamanerii foliis  
angustioribus,* Herm. Pared. Bat. Prod. 2I3. Pared. Bat. 36.  
JPlulE Phytog. 76. 6. Almag. 36. *Apocynum erectum. Salicis  
latiori folio, umbellaturn, floribus Aurantiis,* Ejusd. Phytog. I38.  
Almag. 36. *Apocynum Nova Anglia fubhirsutum, radice tube-  
rosis, floribus Aurantiis,* Herm. Cat. Hors, Lugd. Bat. 646.  
*Apocynum Canadenfe angustifolium, store Aurantia,* Mon Hort.  
files. 232. *Apocynum erectum minus latifolium Americanum,flare  
umbellato Aurantio, petalis reflexis, radice tuberofd,* Breyn.  
Prod. *2.T5.* BASTARD IPOCACUANNA.

It is imported *from America* by the Name of **IPOCACUANNA.**The Root is of a dinky Colour,-and has a poisonous Quality.  
*Dale. ’.*

*’ Bocrhaaue* enumerates twenty-two Species of the APOCY-  
NuM; but! know of nothing remarkable with respect to their  
Virtues. ...

Mr. *Sarrdzin,* however, in the History of the Royal Aca-  
**demy os** Sciences for **I73o.** says, that the**APOCYNUM MAJUS  
SYRIAoUM RECTUM** furnishes the Inhabitants of *Canada*with a Juice, *of* which they make Sugar f He says, they also  
gather the Dew, which in found in the Bottom of the Flowers.  
. Dr: *Harris,* in his Dissertations, informs us, that the *Apocy-  
num,* a Root Very like the Ipecacuanha, is imported to us from  
*Jamaica,. Porto-Bello,* and *Virginia c* This works excessively  
both hy Vomit and Stool, eVen so as to exhaust all the Strength.

This cannot he distinguish'd from the true Ipecacuanha in  
Powder, buy may in the Root ; for the Filament, or Fibre,  
that runs thro' the Meditullium of the *Ipecacuanha,* is of a  
whitish or ash Colour, but that of the *Apocynum* is yellow.

I helieve this Observation is. perfectly just. I remember, sortie  
Years ago, I directed half a. Dram os Ipecacuanha *for* a Far-  
mer in the Country, at the Request of a near Relation os my  
own, to whom he was Tenant. It happen'd, by some Accident  
or other, that the Person for whom it was prescribed did not  
take it; but some few Weeks after, the Gentleman who desir'd  
me to direct it, took it himself; the Consequence os which was,  
that he Vomited excessively, and thin watery Stools came from  
him insensibly for several Days. This made me think he had  
taken *Apocynum,* instead of *Ipecacuanha.*

APOCYRTUMENA, αποζυρτἣμενα, from ἀπνκυράομαι, to  
be turned archwise. Decreasing in manner of a Cone. Ἀποκυρ-  
τήμραα εις όξὑ δια-πυήμάτα\* " Suppurations gathering to a sharp  
" Head.” *Hippocr. inProgn. ... .*

. APODACRYTICA,Snce^axpuTiket, from ἀπὸ, signifying  
negatively, and δάκρυ, a Tear. Medicines first exciting, and  
aster evacuating, the superfluous Moisture os the Eyes, suppressi,  
ingTears, and drying the Eyes; or, in one Word, *Delacry-  
mativesso* fur in this Sense is *Delacrymare* taken by *Pliny* and  
*Columella.* **We** meet with a. List of Remedies of this Sort in  
*Artius, Tetrab.* I. *stcrm.* 3. *Capo* I 38. among winch are Ce-  
landine, Germander, Centaury, Oninns, Pimpernel, Helle-  
bore, *etc.*

. APODEIXIS, ἀυόδειξις, from ἀποδιάκνυμι, to demonstrate.  
Demonstration. ’

APODES, ἄποδες, from a Neg. and ποὑς, a Foot. A kind  
of Binds winch have Very short Peet: They are also call'd κύψελ-  
*Kos, Cypselli. Aristot. Lib.* q. *Animal. Cap.* 20. These Binds  
are like Swallows, and are Very much upon the Wing on account  
of their Feet. They build in Rocks, and sty all over the Seas ; nor  
is there any Ship that saiis never so sar from Land, but finds  
itself within the Reach of these Apodes, which sty about it.  
Other Kinds sit or stand; these never rest themselves but in  
their Nest, where they hang or he. They differ as much in'  
their CEconomy, especially as to Food. *Pliny, Cap.* 39. *Lib. jo.*

**Apodes,' boiled in Wine, are a Remedy for the Gripes,***Idem, Lib.* **3o.** *Cap. I.*

APODYTERIUM, ἀποδύτήβων, from ἀπβδήομαι, to un-  
eloathe; \* Α private Room hefore the Entrance into the Baths,  
where they who went to bathe put off their Cloaths : It is also-  
Called *Conisterium,* and *Spoliarium. Castellus.*

APCEUM, ἄ-υοιον, from α Negative, and ρὶῖοος, of some  
Quality. Void of all sensible Qualities, *insipid,* without Astrin-  
gency. Acrimony, or any remarkable Property; such as among  
humid Substances, Water ought to be; and, among dry ones.  
Amylum. *Galen* judges insipid Aliments to he more nourish-  
ing than the acrimonious and bitter. *Galen, de Al. Fac. Lip.* 2.  
*Cap.* 64.

APOGALACTISMUS, *d.'atfyeDiouljtirp.ii,* Os ἀπὸ, from,  
and γαλακτίζω, to suckle, from γάλα. Milk. A Weaning.  
**See ABLACTATIO.**

APOGLAUCOSIS, ἀπογλαύκωσις. See GLAUCOMA.

APOGONA, ἀπογονα. Vital, likely to live. Ἔστιν οὐδὲν  
ἔσω τοῦ τεταγμένου χγήνου, ἐκάστνισι τὰ *redlapiira.* ἀπόγονα γίνεται.  
" ThoseWomen who meet with no Disaster within the Term,  
" are delivered os strong or lively Children.\*' *Hippocc Lib.* 2.  
*Epid,* in this Pisce, and also in *Lib.* 6. *Epid. Sect.* 8. *Aph. 6.  
dociycaa.* signifies the same aS γονιμα, or γονὰ, in *Lib. ariceoctp-  
Matt*

APOLEPSIS, ἀπὸλεψις, from ἀπβλαμβάι'ομαζ, to be sup-  
pressed, retain'd, *etc.* An Interception, Suppression, or Re-  
tentioIL Thus ἀπολήψιίς όυρων, in *Hippocr. Prorrh.* is a Sup-  
preffion or Retension Os Vine; and in *Coac. Pranot.* ἀπόληψις  
κβιλιης, a CostiVeness. Again, in the same Author, we osten  
meet with ἀπολήψβς φλεβῶν, as in *Lib. de Rat. Pict, in Morb.  
acut.* that is, a Stagnation from a too great Oppletion *of* the  
Veins. There are also ἀπολήψιες πνευματων ὰνὰ *rde φλίβϋί,*which *Galen* explains as follows: Πνευμάτων ἀπολήψβς άνὰ τὰς  
ψλἐβας ἐικός ἐστιν ἐνή τῆς άσφυξίας λέγειθαι. φλἐβας γὰρ ἐκἀλον οι  
παλαιοἰτἁς ἀρτερίας- άπολήψβς ουνπνευμάτωντὰς όιον κατακλίσίίς  
τε καὶ ήσυχίας δυνάτὸν λέγβν. " It is probable,, that by these.  
" ἀπολήψιες (Interceptions) os the Spirits in the Veins, he  
*or means* a Cessation os the Pulse; for the Antients call'd the  
" Arteries by the Name of Veins: These *Apolepsies os* the  
" Spirits, then, may be called their sinking into Rest and In-  
" activity." Such an *Apolepsis of* the Spirits attends a Cata-  
lepsis. Apoplexy, and Epilepsy, when the Brain being refrige-  
rated, and the Blood in a Stagnation, the Course of the Spirits  
is intercepted by the congealed Blood. Again, in the feme  
Book, melancholy Persons are said to be affected with ἀπολήψιες  
πνευμιάτων διὰ φλεβῶν, which is thus explain’d by *Galen z  
Tivevlenror* δὲ ἀποληψιν ἐι μὲν τῶν κατ’ ἀρτηρίας λέγίι, τί ἄλλο  
ἤ ἀσφυξία γένοιτ ἄν τὸ πάθος; ἐι ἀΐὲ τῶν κατὰ τὸν πλεήμκνα,  
πάλαν άστταῦθα τήν καλιςμένην ἄπνοιαν ἀινίάτεταΓ " If by an Apo-  
ec lepsis of the Spirits he means those in the Arteries, what can

be the Consequence but a Cessation of the Pulse .? But if he  
" speaks it of the Spirits in the Lungs, he seems to give another  
" Hint, tho' hut obscurely, at whur we call an *Apncease*

There is also an ἀπόληψις φλεβῶν in a quite different Sense,  
and means no more than the Tying or Compressing of a Vein  
or Artery, in order to prevent or stop an Hzmorrliage: This  
Method is recommended by *Hippocr. Lib.* 6. *Epid. Sect. y.  
floh'3\** And ἀπόληψις νουσίνματος, in the same Author, signi-  
fies the Preventing the Course of a Distemper, by putting a Stop  
**to** the Humours which caused it. *Epid. Lib. 2.*

AKOLEXIS, ἀποληξις, from ἀπολήγω, to cease or end. A  
decaying Time os Age, in *Hippocr, osmajscyyik.* and is there  
opposed to ἀκμή ήλικίης, " the Flower os Age."

APOLINOSIS, ἀπολίνωσις, from λίνον, Flax. So *P. AEgi-  
neta* cans the Method of curing a Fistula by raw Flax. See  
**OMOLINON.**

APOLLINARIS, Herba. The same aS HYOSCYAMUS,  
which see:

APOLYSIS, ἀπολυοςς, from ἀπολύω, to release. A Solu-  
tion, or Release, which is diversisy'd according to the Subject ;  
aS, for Instance, it signifies, in *Hippocrates,* the Exclusion *of  
the* Foetus, *Lib. 5. Epid,* of the Secundines, *Lib.* 2. *Prorrhet.*the Solution of a Disease, *Coac. Presence,* and also the .Un-  
loosing of a Bandage. *De Fract.*

APOLYSIA, απολυσία. *Erotian,* on *Hippocrates,* says it  
is either a Resolution of the Limbs, or the Relaxation os a  
Bandage.

APOMAGMA, ὰπόμαγμα, from ἀπομἀ-^ω, to absterge.  
Any thing proper to he used as an Instrument for absterging  
excrementitious Matter or Sordes, as a Linen Handkerchief for  
the Eyes, and a Sponge for Wounds.

APOMATHEMA, ἀπομἀθημα, from ἀπὸ. Negative, and  
μανθάνω, to learn. In *Hippocrates, Lip. de Fract.* it signifies  
an Oblivion of whet has been learned.

APOMELI, ἀπομελι. A sweet Drink made of Honey-  
combs, diluted and boiled in Water. The Manner of preparing,  
it is thus described *Aetius, Tetrab.* 2. *Serm.* I. *Cap. ipsp.*

Take white Honeycombs, full of pellucid Honey, which  
press out .with your Hands, and mix with the best Sorinss

Water: If your Honey he thick, take four Parts of Wa-  
ter for one of Honey; if liquids, let the Water he to the  
Honey as three to one. If the Combs he pretty dry, cut  
them in small Pieces, and work them with your Hands in  
the Water first measur'd; after which press and strain off  
the Liquor, and by measuring it you will know what  
Quantity of Honey to add. Then put the Liquor into a  
new Earthen Pot, in which Water has been hefled before,  
in order to take off its earthy Quality, and boil it over a  
clear Fire, still flamming off the Spume or Wax as in arises.  
When no more ascends to the Top, and about a seventh  
or eighth Part of the Whole is boiled away, remove it  
from the Fire, and let it cool. After it is perfectly cold,  
the next Day shim off what swims on the Top, and pour  
the rest into new Earthen Vessels, in order to be set aside  
in your Wine-cellar.

*Galen, Com.* 3. *in Hippocr, irsoi dysiav,* observes, that *Apo--  
rneli* was called by *Hippocrates,* and many others, οξὑγλυκυ or  
οξυγλυκὲς *(Oxyglycy* or *Oxyglyces)* ; and that some made it of  
Honey and Vinegar, others os Honeycombs and vinegar boiled  
together: For he makes two Distinctions; one sort, he says, is  
Tweet, another more upon the Acid ; and this latter is made  
either of Honey and Vinegar, or Honeycombs, and Vinegar.  
We, *says Galen,* make it os Honeycombs, putting Vinegar to  
the Honey, and boil them tili their Qualities are united, and the  
Force of the Vinegar is broken.

Apomeli is endu'd with an incisive and abstersive Virtue:  
It purges Bile downward, provokes Urine, and prepares putrid  
Fevers for a Solution. It is however an Enemy to hot and dry  
Constitutions; and is hurtful in hot Distampers, and Inflam-  
matioris of the Praecordia ; and rather increases than allays  
Thirst. It is given aster Meais ; sor it does Harm upon a full  
Stomach. *Aetius, Cap. praedicto.*

. APOMYLENAS, άπομαλήνας. *Galen, in fixeg. Vic. Hip-  
poc.* explains this Term, by προβαλῶν τὰ χείλη συνημμέιως,  
." thrusting out the Lips compress'd together.''

APOMYLLENE, ἀπομυλλήνη. *Erotian,* on *Hipporates,*fays, Τῆτβ γίνεται όταν διαστροφὴ καὶ οιον σπάσμα περι τὸν γἐνέν  
μετὰ παρέσεως *oyesi, μάλίί-Λ δὲ er.* ῆςληγῆς\* " An *Apomyllene*" happens when there is a Distortion, and, as it were, a Con-  
vulsion, with a Relaxation os the Cheek, or Parts adjacent,  
" principally occasioned by a Blow.''

APONENOEMENOS, άπονεγοημένως, fromncesvoha, to be  
negligent or averse. An Adverb importing an utter Aversion to  
**. a** thing. *Hippocr. Epid. Lib.* 3- *Egr.* 2. Πρὸς τὰ γεήματα  
ἀπονενοημένως ἐιχεν\* ." The Patient nauseated all manner of  
" Food?' .... ' gul ς .

APONEUROSIS, άπονεύρωοςς, from ἀπὸ and νεῦρον, a  
Nerve. The Extremity of a Muscle, called by *Hippocrates*τείνων, a Tendon, or Chord:

APOPALLESIS, APOPALSIS, ἀποπἀλλησίς, ἀποπαλοςς,  
from ὰποπάλλω, to throw off, in an hasty manner. An Expul-  
sion, or Extrusion, aS when the Foetus is expelled hy Abortion.

*orsfi yvefotii.*

APOPATOI, ἀποπατοι, is a Word often used by *Hippo-  
crates,* and is explain'd in *Erotian* by ἀφοδεήσ-ις, which signifies  
as well the Places of Easement, as the FoeceS. So *Suidas* ex-  
plains ἀπόπατος by ἄφοδος. SeeAPHODOS.

APOPHLEGMATISMUS, αποφλεγμάτισμὸς, of ἀπὸ, from,  
and φλέγμα, Phlegm. A Medicine contriv'd for drawing  
Phlegm from the Mouth, and thenee evacuating it by Spitting;  
for which Purpose it is held in the Mouth. Such Medicines, by  
their hot pungent Quality, stimulate the Fibres, and make them  
compress the Glands, whereby their Contents are faster thrown  
out into the Mouth, and so a Drain is promoted of such watery  
pituitous Humours, from all Parts of the Head, as have any  
Consent therewith. In Comas, Lethargies, Epilepsies, Palsies,  
.and, in short, in all Disorders from a moist Temperament of the  
Brain, these Remedies are to besused with good Success.

As to the Form and Consistence of *Apophlegmaiiscns,* they  
are various. *Morellus* distinguishes them into *liquid* and *dry*; to  
which *Gobius* adds a third, that is, *soft,* or in the Form of an  
Electuary. And to these a fourth may be added, which consists  
. of Fumes or Vapours.

Liquid Apophlegmatisms are made of Decoctions, Infusions,  
express’d Juices, and Officinal Liquors; and these either mixed  
' together, or alone.

Those which are solid usually consist Of Gums, aS Mastich ;  
acrid Roots, aS Pellitory of *Spain,* or Horse-radish; Leaves,  
as those of Tobacco; Salts, as Nitre, Sal Gemmae, or Alum;  
-and Fruits, as Pepper. These are sometimes used alone, and  
without any Preparation ; and sometimes mix'd and made into  
the Form of Powders, Balis, and Troches, which last are ordered  
**to he** held under the Tongue, and to he suffer'd to dissolve gra-  
- dually. The Powders are directed sometimes to he taken naked  
. into the Mouth, and sometimes to he ty'd up in a Rag, and so  
**to he** chew'd.

Electuaries are form’d of such Ingredients powder'd, and  
made up with some Fluid, proper to give them a Consistence.

Vapours, are convey’d to the Mouth by means of a Funnel,  
or otherwise, from Decoctions of stimulating ingredients. And  
Fumes are received from dry Ingredients burnt, either in the  
same Manner, Or by means of a Pipe, as in smoaking Tobacco  
either mix'd or unmin’d. . \_

Upon this Occasion I must not omit giving the Form of a  
medicated Tobacco, of which that so much advertis'd under  
the Name of the Cephalic and Oppthalmic Tobacco, is an hum-  
ble Imitation:

Take of the Flowers of Rosemary, Betorty, Eyebright, each-  
two Handfuls; of Aloes-wood, Sassafras, yellow Amher,  
Clove-bark, Storax Caiamita, each an Ounce ; of the  
external Peel or Husk of Pistachio-nuts, an Ounce and an -  
half; of the Cortex Elaterii, half an Ounce: Let all  
these Ingredients he powder'd, and mix'd together. Mix  
sour Ounces Of these ingredients with a Pound of Tobacco,  
to he smoaktl in the common manner.

If all these Drugs are faithfully put in; the Srfioke is of an  
exceeding fine Smell. As I was acquainted with the good Ef-  
fects of this, long before I knew any thing of Medicine, I have  
had many Opportunities of making myself acquainted with its  
real Efficacy, and know it to be capable of affording singular  
Relief in Dimness of Sight, and habitual Disorders of the Head -  
proceeding from a Redundance of tenacious Lyinph, provided it  
is duly persisted in. And it must be confess’d, that this Mix-  
ture has perform'd something littie less than , a Miracle; in mak-l  
ing Tobacco agreeable, and of some real Use.

AS to *Apophlegmatisms,* the Choice of the Ingredients **and**Forms must be directed by the several Circumstances relative  
to the Disease, the Patient, and the Intentions of the Phy-  
sician. - - w - - . .

Thus in Paralytic and Lethargic Cases, when a Patient can-  
not chew a Solid, nor. manage a Liquid properly in his Mouth,  
n soft Form, as’that of an Electuary; is best adapted to**she**Case; because it dissolves gradually, and produces the intended  
Effect, without that Care of tile Person who uses it, which is  
requisite in other Forms. In these Disorders also the Fumes of  
Narcotic ingredients are highly prejudicial;

But with respect to *Apophlegmatisms,* as well as every thing  
else relative to Medicine, Circumstances are so various, and  
complicated, that much must be left to the Discretion and  
Judgment of a Physician, whose Reason and Experience will  
furnish him with a Sagacity sussicient to enable him to make a  
proper Choice Of Ingredients and Forms suited to particular  
Cases which occur. It were to be wish'd, that universal Rules  
could be laid down in Medicine, and Maxims which admit of  
no Exception, because this would render Abilities and Learning  
less necessary, which, according to the ordinary Course of hu-  
man Nature, cannot possibly sail th the Share of every one  
whose Duty it is to attend the Sick.

The' *Apophlegmatisms* in the ordinary Acceptation are con-  
fin'd to things taken at the Mouth, yet whatever by a Stimulus;affects the Glands of the Mouth, Fauces, and those of the  
Membrana Pituitaria describ'd by *Schneider,* so as to increase .  
the Discharge of pituitous Humours, may Properly enough be.  
call'd *Apophlegmatisms* ; thus Snuffs of all Sorts are a Species of  
*Apophlegmaiifms.*

.. A *very* effectual *Apephlegmatism.* under the Name of *Pilae  
Masticatoria, Dy* spitting Balls, is thus prepared :

Take Mastich, three Ounces.; Pellitory of *Spain,* Stayefacre;  
each two Drams ; Angelica-root, half a Dram ; Cubebs,  
Nutmegs, each one Dram ; Euphorbium, half a Scruple ;  
Wax enough to make them into little Balis or Pellets':  
Is the Euphorbium be thought too hot, it may he left out,  
*sisutnesis Dispensatory.*

APOPHRADES; ἀπσφράδες, from the Singular ἀποφρἀς, una  
sortunate, unlucky; an Epithet apply'd to those Days in which  
an acute Distemper comes to a fatal Crisis, or to no Crisis at  
all. *Castellus.*

APOPHTHORA, ἀποφθορὰ, from ἀπο?0είρω; which is from  
the Original Φθείρω, to corrupt. An Abortion. The Word is  
used by *Hippocrates,* and also αποφθαρμα, (Apophtharma) a  
Medicine to procure Abortion, *Lib.* 5. *and yi Epid;* Seo  
**ABORTUS.**

APOPHY AS; ἀποφυἀς, of ἀπὸ, from, and φύω, to grow.  
An Appendix ; any thing that grows to, or proceeds from an-  
other, aS Boughs and Branches. Thus άποφυάδες *Lib. cries  
osiot/ durtr.* are the Ramifications of the Veins.

APOPHYSIS, ἀποφυοςς. See the etymology under the pre-  
ceding Word. The Piocess or Protuberance of a Bone; or that  
kind of Eminence -of a Bone which is continuous, and makes  
One Piece with it, and is called by the *Grech* Term *Apophysis,*which signifies an Excrescence, because it grows or shoots out  
immediately from the Pone itself; such are the sharp Eminences.  
Of the Lower Jaw, *etc. lVinsiow.*

APOPIESMA, ἀποπίεσμα, from ἀποπιέζω, to compress.  
An Expression os Humours by Compress in the binding up of  
Wounds or Fractures. *Hippocr.'r.gi dyVMV.*

APOPLECTA. A Name for the internal Jugular Vein,  
which ascends by the Side of the *Aspera Arteria. Castellus.*

APOPLECTICA, Medicines against the Apoplexy. *Blany  
card.* They are so called instead of *Antapoplectica. Castellus.*

APOPLECTICoE VENAL The same **as JUGULARES**VENAE, which see.

. APOPLEXIA, Ἀποπληξία, from άποπλήανω, . to strike,, or  
knock down. An Apoplexy. This by the *Latin* Writers is  
called *Attonitus Morbus. Celsius* and *Caelius Aurelianus* inform  
us, that the most antient Medicinal Writers gave this Name to  
that Species of Palsy which succeeds what we call a true *Apo-  
plexy- '*

" Any Diforder which instantaneoufly deprives a Man of Life,’  
who a sew Minutes hesore was, or at least seem'd to be, in  
perfect Health, may, according to the Derivation of the Word,  
be properly enough called an *Apoplexy ;* but it would he more  
methodical to confine the Word *Apoplexy* to such sudden Disor-  
ders caused by Affections os the Brain.;

**OBSERVATION** I.

A certain Envoy from *Florence* to the *French* King was sud-  
denly seiz’d within Apoplexy, which put a fpeedy Period to  
his Lise, though, just before, he appeared to be in an entire and  
confirmed State os Health. . ;

Upon opening has Body, I found his Heart turgid ; and when  
*I* cur it .open, it discharged three or four Pounds os Blood.  
The.Orifice os the great Artery was at the same time dilated to  
such a preternatural Size, that it would have admitted a Person's  
Arm.' *Andreas Laurentius in Controversies Anatom.*

From this Case *Moebius* concludes, that Apoplexies draw  
'their Origins rather from the Obstructions of the Arteries, than  
those of the Nerves. . ‘am ' ' ”

From this Case also *Bartholine* concludes, that the Causes os  
*Apoplexies* are not always to be look’d for in the Brain, fince  
. they sometimes proceed from the Bloed being intercepted in the  
obstructed Vessels of the Heart. *Boneti Sepulch. Anatom.*

**OBSERVATION Π-**

Λ certain Student had the Misfortune to be wounded with the  
Point of a Sword near his Nose, and immediately below the Or-  
bit of the Left Eye. Soon after, he was depriv'd both of his  
Speech and Reason, and seiz'd with an Apoplexy and *Stertor^*which quickly put an End to hiS Lise. Upon opening the Cra-  
nium, I found the Wound not only passing thro' the Orbit os  
the Eye, and the *Os Cribrosum* near the *Crista Galla,* but also  
affecting the Right Ventricle of the Brain ; from which I ex-  
tracted a Portion of black, grumous, and fibrous Blood, as long  
find thick as my middle Finger. The Base os the Brain, and  
the Region of the Cerebellum, were fist'd with extravassted  
Blood; and the whole Substance os the Brain itself appear'd os a  
ruddy Colour, as if it had been inflam’d. *Jac. FVipferus Ex-  
ercet. de Apop lexia.*

**OBSERVATION** IIL

A certain Gentlewoman of Distinction, having for a consi-  
derable Number os Years been subject to spasmodic Disorders,  
began at last to flatter herself with rhe Hopes of a perfect Reco-  
very. She complained in the mean time of a violent Pain and  
Heaviness in. her Head ; soon aster which she was seiz'd with a  
violent convulsive Fit, which terminated in an *Apoplexy,* which  
soon put an End to her Lise. Upon rading her Scull, the Ves-  
seis running thro' the Meninges and Brain appear'd distended  
and stretch'd with Blood , whereas in dissecting the other Parts  
of her Body, scarce any Blood at all appear'd. Upon removing  
the thicker Membrane, thro’ the other flender and pellucid one  
we observed a limpid Water.filling the several Meanders of the  
Brain, and, as it were, overflowing the Whole of its Substance.  
*Eonet.*

**OBSERVATION** IV.

A Man of seventy Years of Age, happening to sail from a  
considerable Height, received a large Wound in his Scull. Next  
- Day he recovered a littie; hut on the fourth Day died of an un-  
expected *Apeplexy,* after spitting up some purulent Matter.  
When we were examining the internal Parts of his Head, we  
first sound the Ventricles of his Brain fill'd with a great deal of  
a certain Humour: Next wo found a large Fragment of the  
*Os Cuneiforme* separated from the rest, and bearing upon the  
adjacent Parts, in the most remote Recesses os which there was a  
great deal os coagulated Blood lodg’d. But the *Apeplexy* pro-  
- ceeded partly from *the Obstruction ofthe Processes of the Medulla  
Spinalis,* which are the true Origins of the Nerves, and partly ‘  
from the Angu station of the *Rate Mirabile,* winch is formed by  
the intermixed Concourse of the Jugular Veins, and the carotid  
and cervical Arteries. These noble Parts heing obstructed, the  
Patient must of course have been deprived of.Sensation, Motion, I  
and Life, according to the Maxim of *Celsus, S.* 2. *Servari non*

*potest cui Basu Cerebri percussedest t* No Art can save him, the  
Base of whose Brain is wounded. - . . - - '

**OBSERVATION** *V. .?*

A certain Butler, happening to take Flowers .of Antimony  
from a Mountebank, fell into an *Apoplexy,* - during which he  
had such a Violent Pty al ism, that *six* full Measures os frothy  
Phlegm were discharged from his Mouth and Ears.

Upon opening his Body, when dead, we sound his Lungs,  
the whole Region of his Breast, his Stomach,, and his Head,  
full of the same kind of frothy Phlegm. *Bonei.*

**OBSERVATION** VL **.Ἀ .**

In dissecting the Body of one who lately died of an *Apoplexy*in the Left Ventricle of the-Heart, I observed a Portion os Pat  
ascending into the *Arteria Venoso,* where, after blocking np its  
Orifice, it branch'd itself out in two Horns like the *Pythagorean*Letter Y. *Bonet.*

Observation VII.

A certain Priest, towards the End of the *Consecration,* be-  
came wonderfully foolish, and soon after died Apoplectic.  
Upon dissecting his Head, some round whitish Bladders, full of  
a phlegmatic Humour, were found upon the Corpus Callosum,  
which were taken for the immediate Cause of so satal a *Dis-  
order. Eonet. - .........*

**\_ 'i OBSERVATION** VIII. **s**

A Woman of *Leyden* had an external Tumor on the Right  
Side of her Forehead, which being taken off by the Hand of a  
skilful Surgeon, three Days pass'd without any Suspicion os a  
more terrible Disorder appearing; however, on the fourth Day,  
the was suddenly seiz'd with an *Apeplexy,* which prov'd mortal,  
as the learned *Walaus* had prognosticated, from Instances of a  
like Nature; because in such Tumors ofthe Head the Pericra-  
mium is hurt ; and when the internal Membranes adhering to -. '  
the Brain are dilated, -the Brain itself salis down, and compresses '  
the Ventricles. *Eonetus* from *Bartholine.*

**so. .. OBSERVATION IX. '**

A certain old Clergyman of an untainted moral Character,  
of a *corpulent Make,* and a short wry Neck, having heen long  
Valetudinary, and leading a sedentary Lise, contracted a violent  
scorbutic Cacochymia; heing also afflicted with a Difficulty of  
Breathing, an heavy Pain in his Head, and an unusual Torpor";  
he could scarce undergo any Labour or Fatigue, besides going  
between his Chamber and the Chapel every Day : Accordingly  
one Morning, when he had gone into the Chapel a littie before.  
Prayers began, and fallen upon his Knees, he was suddenly  
struck with an *Apeplexy,* and hecoming speechless and senseless,  
fell prostrate on the Ground. But heing forthwith taken up,  
and inis Cloaths taken off, he was put into a warm Bed. Upon  
which, I myself, and other Physicians, being called, we found  
him not only deprived *os* Sensation, Pulse, and Respiration,  
but his whole Body was even cold and stiff; nor could we by  
the most diligent Application of any Medicines whatever re-  
store him, either to Life or Warmth. Hence we suspected,  
that by the Very first Shock of the Distemper, the Pulsation of  
the Heart was stopp'd, and the Motion os the Blood suppress'd.. .

\* Next Day we opened the dead Body, which by that time  
was become considerably stiff, not in the least doubting but a  
Distemper which had proved so suddenly mortal, would leave  
some remarkable Traces in the Brain. But neither in it, nor  
in any other Part within the Cranium, were the least Traces of  
this Violent Distemper to be observed ., for the Vessels running  
through the Meninges were only filled with a due Quantity of  
Blood, without any inflammation or Extravasation. The Brain,  
the Cerebellum, and Medulla Oblongata, together with all  
their Processes and Protuberances, appeared every-where sound ’  
and well-coloured, both externally and internally. There was  
no Effusion either of Blood or Serum in their Pores or Ducts :  
Neither was there any Coacervati on of Matter sound in the  
large Ventricles : Besides, the *Plexus Choroides,* both within the  
Brain, and behind the Cerebellum, did not in the least appear  
faulty; so that the morbific Matter, aS fine and subtile aS the  
Animal Spirits themselves, which it had affected, was entirely . . \*  
unobservable; and we could only argue for its being actually .  
there from the effects it produced. But lest the morbific Mat-  
ter should be lodged somewhere else, after having taken an ac-  
curate View of the several Parts os the Brain, we descended  
to the Thorax, where we found the Lungs discoloured, and dis-  
tended with a frothy Ichor. A Circumstance which sufficient-  
ly accounted for the Difficulty of Breathing l But the Heart was  
sound, untouch'd, and entirely free from all manner of Ob-  
structions, or polypous Concretions. Neither in its Neighbour-  
hoed, nor in any of the adjacent Viscera, was there any Abs- .  
cess or Apostemation found, by whose Contact, or foetid Ex-  
halations, the Heart, if such a thing be possible, could be op-  
pressed, and Respiration stopped. *fVilliss '*

**OBSERVATION** X.

I had an Opportunity of seeing a Girl who was killed by  
Lightning, but no Marks Of Violence appeared on her Body,  
except two Scars all along her Baek, which looked as if they  
- had been made with a red-hot Smith’s Forceps. Internally  
there was no apparent Disorder, except that the Extremity of  
one of the Lobes of her Lungs seemed to he somewhat burned.  
*Brasseval, Com. ad Lib.* I. *Hippocrat. de Vict.inAcut.*

When in the Year I58I. the Bell-ringers of *Befanyon* were  
ringing the Bells, in order to prevent the Effects of a Tempest,  
one of them, being struck with Lightning, died on the Spot.  
Upon inspecting his Body, no Wound was discovered, and the  
Skin was entire, only his Neck was a little blacken’d, and the  
Neck-band of bis Shirt tom. Upon opening hrs Body, the  
principal Viscera, the Heart, Liver and Spleen, were sound  
unassedled, and the smaller Intestines blasted. *Bonetus* from *Gil.,  
iertus.*

*Beneventius* affirms, that an Apoplexy may be occasioned by  
Lighming [2le *Abdi Cap.* 2.] ; and that he himself knew a Fa-  
ther and Son, who, being struck with Lightning at one and the  
same time, became Apoplectic, and were afterwards throughly  
cured; for such is the Influence of Lightning, that it can ex-  
cite Commotions in the Humours of the Brain, and render  
' \_ People Apoplectic. Accordingly *Hildanus, Cent.* 3. *Oof.* 26.  
mentions the Cafe of a Servant, wbofe Head swelled prodigi-  
- ousty, and became biack a little after he had been kill’d by the  
Lighming; hence ’tis plain, that in this Case, the Brain was  
very much injured. But Lighming rarely excites a true Apo-  
plexy ; since, for the most part, it either kills entirely, or pro-  
duces firch an Effect upon People, that, losing their Colour,  
and their Pulse, and Respiration being quite destroy’d, they  
Iefemble dead Persons.

**OBSERVATI0N XI.**

In a very severe Winter, when every thing was covered with  
Snow, a certain Gentleman of great Learning was seized with  
a violent Pain in the Left Side of his Head; and, afterwards  
complaining heavily of Pains in his Abdomen, he at last died  
*Apoplectic.*

Upon dissecting his lower Belly, the largest Gland of his  
Mefentery was found fcirthous and exulcerated. Upon open-  
ing his Cranium the Right Carotid Artery afcendrng within  
the Cranium was quite ossified, or even petrified, if I may  
say so, and its Cavity scarce permeable. The Right Vertebral  
Artery was alfo a Third larger than that on the opposite Side.  
*Bonet.*

**OBSERVATION** XII..

A certain dull Fellow had the Misfortune to be seiz’d with  
an Apoplexy, which proved mortal to him. Upon searching  
for the Causes of his Disorder, we sound bis Brain flaccid. The  
Meninges were overflowed with a mucous and viscid Humour ;  
and even the third Sinus itself, with its adherent Vessels, were  
filled with the fame Liquor. The Ventricles of the Brain were  
also filled with it. In the Left Ventricle of the Heart, there  
was a Polypus formed by a vifcid Matter, and the Spinal Mar-  
row was moistened by a Lymphatic Fluid. *Bonet.*

**OBSERVATION** XIIL

A Man of fifty-six Years of Age happened to he seized  
with an Apoplexy: the whole Right Side of his Body was with-  
in six Hours after convulsed and contracted ; but more especial-  
ly the Hand and Foot on that Side. The whole Lest Side of  
his Body, in the mean time, became paralytic ; he could not  
'A speak, but a great deal of vifcid Spittle flowed from his Mouth.  
On the second Day, he felt a kind of Concussion about bis  
Breast, and died as if he had heen suffocated.

Upon opening the Craninm, we found the Substance of the  
Brain found and enure : But the Right Ventricle was full of  
an extravafated Blood, which was black, purulent, and streak-  
ed with disterent Colours. The Bottom of this Ventricle was  
also corroded, and, as it were, excavated.- Nothing uncom-  
mon was found in the Left Ventricle, the Lungs were black  
and flaccid, and a Polypus was found in the Right Ventricle of  
the Heart. '

The Wise of the Deceased informed us, that, for many Years  
past, he had been subject to a Vertigo; that many Days before  
his Death, he had complained of a heavy Pain of his Head ;  
and that, the very Day before the Apoplexy seined him, a Dis-  
charge of Blond was made from his Nostrils. *Bonetus* from  
*Baglivi.*

Thus we see many Causes, and those very different from  
each other, may induce an Apoplexy. And, indeed, whatever  
is capable of putting a sudden and entire Stop to the Circula-  
tion of the Blood, may heve this Effect. Thus a Palsy of the  
Heart, of the Lungs, or of the Muscular Coats of the priced-  
pal Arteries, may he readily conceived to put an effectual Stop  
to the Circulation, and consequently to cause an Apoplexy.  
The fame Effeci may he produced by an Over-fniness of the

Vessels; sor where there is no void Space to move in, no MV  
tion can be carried on. Polypose Concretions in the Heart, or  
its Auricles, in the large Arteries, or Veins, especially the Ju-  
gulars, in the Sinuses of the Brain; particularly in or near  
the *Torcular Hirophili,* or in the large Vesseis of the Meninges ;  
sudden Ruptures of any of the large Vesseis near the Heart, of .  
of smaller in the Meninges, in the Substance of the Brain, cr  
its Ventricles, whether Sanguiferous, or Lympbatio j a gene-  
ral Viscidity of the Juices, or Languor of the -vital Powers .  
a Congestion of Humours of any sort; in, or very near, the  
Brain; Wounds, Blows, any Compressure of the Brain, or  
wherever is capable of preventing the Influx of the Nervous  
Fluid into the Canals which convey it from the *Medulla Ob.  
longata,* and *Spinalis,* to the different Parts of the Body; may  
produce this Distemper.

But the two most general Causes of ah Apoplexy are, first;  
a Plethora, or Over-fulness of Blood, to which the younger  
Sort of People, who live freely, are principally subjects

Secondly, a Deficiency in the vital Powers, and a consequent  
Redundance of vifcid and serous Humours, which affects par.  
ticuiarly People advanced in Years.

Sometimes Hysteric Disorders attack the Head, and cause ari  
Apoplexy, which also terminates in an Hemiplegia, exactiy re-  
sembling that kind of Apoplexy which proves fatal to some aged  
and corpulent Persons, and arifes from an Obstruction and Corn-  
pression os the Nerves, occasioned byἈ copious Phlegm con.:  
tained in the cortical Part of the Brain; But the Apoplexy in  
Hysteric Women seems to proceed from a very different Cause ;  
for it seizes them frequently after a difficult Delivery, attended  
with a great Lofs of Blood, or proceeds from some violent  
Commotion of Mind. *Sydenham.*

The Gout is also frequently productive of an *Apoplexy.* Sed  
**ARTHRITIS.**

**DIAGNOSTICS** *and* **PRoGNosTIcs.**

*Caelius Aurelianus* has given the Sentiments of the Antienin  
on an *Apoplexy,* in the manner following :

This Diseafe is fo called, because, upon its Approach, the  
Patient drops down on a sudden, as if he was struck dead by a  
Blow. It may be defined, *Α quick and sudden Oppresseon, often  
attended with a Fever, depriving the Patient of Sensation, and  
seizing always instantaneous, but never stawly and gradually:*Its antecedent CauIes may he esteemed the fame with those os  
other Diseases, but the more considerable of them are, the  
heing exposed to continual scorching Heats, or to violent Colds,.  
frequent Indigestions, occasioned by the immoderate Use of  
Baths, and Excefs of Veriery, especially in old Men. This  
Distemper may also proceed from the Meninges heing wounded,  
or in Boys from their Concussion. In some Cases therefore no  
Symptoms are observed previous to the Patient’s dropping  
down; whereas in others feme prognostic Symptoms precede  
the immediate Shock of the Distemper, fitch as Heavinefs of  
Pain of the Head, Vertigo, Ringing of the Ears, Difficulty  
in performing accustomed Motions; Sadness of Countenance,'  
convulsive Twitchings of the Parts, and especially of the Lips 5  
a tremulous and scarce articulate Voice, interruption of Speech,  
without any apparent Reason ; Forgetfulnest of what the Pa-  
tient had but very lately spoken; Fuiness of Countenance, and  
a Difficulty in discharging the Excrements. But these arealso  
generally antecedent Symptoms in such as are threatened with  
an Epilepsy or Madness. The first Approach of the Distem-  
per is attended with Loss of Speech, and Depravation of the  
Senses, by reason of the sudden Shock, perfect Inability of Mo-  
tion in all the Members of the Body, and Distortion of the  
Countenance, and, in some, Retraction and Immobility of the  
Eye-lids, and a Gaping of the Mouth; a full and labouring  
Pulfe, a cold Torpor of the Joints, short Respiration, a llvid  
or leaden-coloured Countenance, and an involuntary Discharge  
of Tears, As the Distemper grows worse, and feems to threaten  
the Patient with immediate Death, the Countenance is so dip  
totted, that it appears longer than ordinary, the Praecordia be-  
come prominent, a cold Torpor seizes the whole Body, the  
Lungs during-Respiration, make a Noife cold Sweats break;  
out on the superior Parts of the Body, the Eye-brows also and  
Eye-lids are drawn upwards, and fixed immoveably in that Po.:  
sition. But if the Distemper abates, and takes a favourable  
Turn, the Torpor quits the Body, the Coldness forsakes it,  
and the natural Heat returns. Some Parts also will he twitch-  
ed with desultory Spafms,' even in those who before were en-t  
tirely free from them. The Humour secern’d from the Fauces  
is swallowed, though with much Difficulty, nor is it hindered  
from heing fo by the Cause which formerly prevented its pass  
sing that way. The Patient also, if prick’d, or call’d upon,  
moves his Eye-lids, and shuts his Lips, as a Sign, that be reels  
the Puniture, or hears the Perfon who calls him 5 and it holds  
universally, that feme die the first Day the Distemper seizes  
them; others survive its Approach for two or three Days j  
and others escape with their Lives ; fome of whom recover im-  
mediately, whilst others are affectsd with a Palsy inone or more  
Parts *of* their Body: Some are also racked with uneasy Com-

motions of Mind, to such a pitch, that they seem to have lost  
. their Reason, to he fad and drowsy, and, if any one awake  
them out of their Sleep, they speak something incoherent and  
foreign to the Purpose. Now this Disorder is the Refiilt of  
*. Stricture,* or *Teastan,* and is of the quick, vehement, and acute

Kind. Old Men are most subject to it, and it generally makes  
its Approaches in the Winter-season, and towards the End of  
.the Autumn. It is by some also styl’d *Parapiexy.* The Head  
.suffers principally in this Distemper, as we may easily conclude  
from its antecedent Symptoms, and the Violence done to the  
Body. The Cute is difficult even in Men of strong and robust  
Constitutions; and thofewhoare weakly and tender yield more  
easily to its Violence, and that forabis additional Reason, that  
they are not able to bear the stronger and more powerful Means  
of Relief. Hence we plainly sind, that the Cure of this  
Disease is more difficult in Women than in Men, and in  
old Men and Boys, than in People who are in the Flower of  
their Age, in consumptive Persons, than in those who are blest  
with a firm and strong Habit of Body. . It is also more diffi-  
cultly cured in those who heve gone through a Course of Sick-  
ness, then in.those who have never laboured under any Distem-  
per. The Winter-feason also contributes to the Difficulty of  
the Cute, not only because the Cold condenses and braces up  
Bodies, but because it is incompatible with some Means of  
Cure and Recovery, such as Riding, or taking free Air in an  
open .Coacts .A Lethargy, Epilepsp, Hysteric Suffocations,  
according to some, the Passy, that Species of Disorder which  
the *Greeks* call’d *Caros* and *Syncope,* all bear a Resemblance to,  
and herder upon, an Apoplexy. There is nevertheless a Differ-  
ence betwixt on Apoplexy and a Lethargy, since every Lethargy  
happens either after, or is accompany’d with a Fever, produces  
a lowPulfe, and does not always deprive the Patient *of* his  
Senses Whereas an Apoplexy seizes without a Fever, renders  
the Pulse small and quick, and causes the Patient to drop down  
suddenly as if he was struck dead; add to this, that an *Apoplexy*sometimes proceeds from a Wound of the Membrane of the  
Brain, whereas a *Lethargy* never does *(This is a Mistake)*. An  
Apoplexy is likewise different from an Epilepsy; since Epileptio  
Patients are affected with Convulsions of the whole Bndy, and  
foam at the Mouth, none of which Symptoms are ever observ’d  
in *Apoplectic* Cases. Aster the Fit also. Epileptic Patients arise,  
for the most part, with their Constitutions found, whereas  
*Apoplectic* Patients come not off without a Palsy of the Parts.  
. An *Apoplexy* is always accounted a Disease of the quick and  
acute Kind, whereas .an Epllepfy is most frequently found to  
partake of a flow and chronical Nature. The Disease of which  
we sure treating, differs also from Hysteric Suffocations; for  
these latter are not preceded by Pains of the Head, and in the  
Paroxysm the Matrix is sound convulsed, and heaving upwards;  
but this never happens in *Apoplectic* Cases. *Besidassc Apoplectic*Women do not remember any thing that happen’d after the  
Fit is over, whereas those who labour under Hysteric Suffeca-  
- tions can both remember and tell what Degree of Pain they  
suffered during the Paroxysm. Hysteric Suffocations are also  
found to be stow and chronical, but an *Apoplexy* never. An  
*Apoplexy* is also different from a Palsy, though these two Dis-  
eases were confounded by many of the Antients, among whom  
were *Hippocrates, Diodes, Praxagoras, Asclepiades, Demetrius,*and some others besides; for they called those People *Apoplectic,*whose whole Bodies were paralyoc, and those Paraplectic, who  
were paralytic in forne particular Parts of their Bodies. But  
*Thernesion* properly easts a Palsy of the Head, with the Opera-  
Dons of the Mind weakened, an *Apoplexy ;* hut the fame Dis-  
order in other Parts of the Bndy, with the Faculties of the  
Mind impaired, he easts only *Palfy.* But there is no Occa-  
sion for wrangling about Circumstances, on which the Method  
of Cure does not depend. We must only consider, that an *Apo-  
plexy* is esteem’d a Disease of the quick and acute Kind, and a  
Palsy a Disorder of a stow and chronical Nature. The *Carus*also, and *Catalepses,* are rank’d among the Diseases of which the  
Patients recover, and they never elevate the Prsecordia, nor  
create fuch a Difficulty of Recovery as the *Apoplexy* does.  
*Caelius Aurelianus, Acut. Lib.* 3. *Cap. 5.*

i Altho’ the *Morbus Attonitus,* by the Grmis called ἀποπλεξία,  
sometimes seizes the Patient without any previous remarkable  
Symptoms, ’tis nevertheless, for the most part, ushered in by a  
sudden and acute Pain of the Head, a Vertigo, a Dimness of  
Sight, a Grinding of the Teeth during Sleep, and a Coldness  
of; the whole Body, but especially of the extreme Parts. Then  
the Patient, like one thunder-struck, chops down, sometimes  
with Shrieks; immediately after, the Eyes are shut, and a Stertor  
enfues; the Difficulty of Breathing is so great, as to occasion  
a Danger of Suffocation, and the Breast cedes to heave, just as  
if it vias bound fast with Cords r Sense and Motion are entirely  
lost, and the only remaining Hope of List consists in Respira-  
tion heing preserved. And, indeed, the Nature and Danger of  
the.Disorder bear a diseol Proportion to the Difficulty or Easi-  
ness with , which Respiration is perform’d , for which Reason,  
ye conclude the Disorder fetal, when the Respiration is either  
intermittent, Sr carried on with great Difficulty. But the

Caso is less dangerous when the Patient’s Respiration is pretty  
*easy,* and when the Liquors he drinks are not again discharg’d  
by the Nose, but freely descend to the Stomach. The Cure  
of this Distemper, when violent, is altogether impossible; and  
even when flight, very difficult; and indeed, mis letter Degree  
of the Disorder frequently terminates in a Paralysis of one  
or other of the Sides, and that generally within the first  
four Days , after which, if the Disease continues, it proves  
sand. Yet the Distemper often affects some in so gentle a  
manner, as only to distort their Mouths, and deprive them os  
Motion, without any Foaming at the Mouth, *Stertor,* or  
*Palfy,* in which Case thev may he recovered by the Use of  
'proper Remedies. This Disease is generally most incident to  
Men between forty and sixty Years of Age, especially if they  
heve the Misfortune to be of a too cold Constitution, to be fre-  
quently afflicted with heavy Pains of the Head, Drowsineis,  
and Dimness of Sight, or if they heve short and narrow Necks,  
live entirely idle, or are addictio to Drinking and Gluttony.  
But a young Man, or even one who is moderately advanced in  
Years, or in Reality any one whatever,, is not, during the  
Summer-season, subjeci to this Disorder, unless very co niid er-  
able Causes concur; in which Case, Death is generally the  
Result. The Winter, on the other hand, paves a more direct  
Road to this Disorder, especially when cold Winds blow, or  
black Clouds hover in the AiI. Hrernorrhoidal Discharges are  
of good Presage in this Disorder ; but Coldness and Insensibi-  
lity are hurtful. Sweats also arising from Difficulty of Respi-  
ration are mortal. People in this Disorder often appear dead,  
when they are really alive, but more especially Women, and  
Men of cold Constitutions. However, the Truth of the Matter  
may sully be discovered, by applying a light Feather to the .  
Mouth and Nose, or by placing a sinall Vessel full of Water  
on the Breast, to which if any Monon is communicated, the  
Patient is still alive; but if they remain entirely unmoved, he  
is dead. *Hippocrates’s* Observation seems to be just. That a  
sudden Pain of the Head, accompany’^ with Loss of Voice and  
*Stertor,* destroys the Patient within seven Days; but that he  
may be preserved, if a Fever happens before the End of that  
Time. *Lommii Opusc. Aureurn.*

The most fatal and terrible of all Apoplexies is that which  
proceeds from an Effusion of Blood in the Brain, from its Vest  
seis heing burst without any external Violence, and which sud.  
denly stops and extinguishes the vital and animal Functions.

. That such an Hemorrhage of the Brain really exists, and  
that the Rupture of the Vessels is its immediate Cause, is soffi-  
ciently plain from the Dissection of Subjects thet have died of  
this Disorder. Upon fuch Occasions, we plainly sind an Ef-  
fusion os Blood, sometimes between the Cranium and the  
Dura Mater, sometimes between the Dura and the Pia Mater,  
but more frequently between the Pia Mater and the Brain, but  
most frequently of all, in the Windings of the Brain itfeif, and  
the Meditullium of its Ventricles. This Effusion happens also .  
sometimes in its Basis, sometimes in a small, and sometimes in  
a pretty large Quantity. From dissecting Subjccts of this kind,  
’tis. alfo plain, that the Biood-vestek, running thio1 the Mem-  
branes and cortical Substance of the Brain, are. sometimes sound  
turgid, and, as it were, aneurysmatic, with liquid, and some-  
times coagulated Blood : They are also sound on forne Occa-  
fions to he aolually burst. The Histories of the Dissections of  
Subjects who have died of Apoplexies, written by the learned  
*Wepsier, rnxy* be confulted for Satisfaction in this Point.

The Part then originally affeoled is the Brain, which is very  
much disposed to, and susceptible of, this Stagnation of the Blood,  
and the Haemorrhage consequent upon in For a very large  
Quantity, and at the least, according to *Malpighi,* a third  
Part os all that Blond which is throws from the Left Ventricle  
of the Heart thro’ the whole Bndy, is carry’d to it by means  
of sour pretty large Arteries ; besides, these arterial Vesiels,  
which convey the Blood to the Brain, are very winding in the  
Whole of their Course, hut especially in the *Pia Mater.* But  
the most considerable Circumstance of all is, thet after these  
very Arteries have enter’d the Cranium, they lay aside their ex-  
tetior tendinous Coat, the principal Instrument of their con-  
tractive Motion, become much smaller than those in any other  
Parts of the Body, and almost resemble Veins *y* nor to men-  
tion, thet these Vessels become at last *fo very* small, thet the  
Transition, of the Blond from them, into their corresponding  
Veins, cannot possibly be observ’d. All these Circumstances-  
concur to make us perceive, why the Blond in these Parts must  
circulate slowly, stop easily, notenter the Veins quickly and  
readily, but, being accumulated by continual Recruits of fresh  
Blond, distend and inlarge the Capacities of the several Ca-  
nais, and lay a Foundation for many subsequent Evils.

From such a Disposition and State of Things as this, the  
Tramition is easy to a Rupture of the Vessels, and an Effusion  
of their Contents, where those Causes concur, which occasion  
a Congestion of the Blond to the Head in too great a Quan-  
titj', or with an undue Impetus, produce its Stagnation there,  
and strongly prevent its free Return thio’ the Veins ; for by  
there means it happens, that the Vessels not only become turgid

-with Blood, but, being too much distended with the continual  
Arrival of more, burst, and pour forth the Blood contain'd in  
them. This principally happens in the small Vessels of the

- Pin Mater, and those of the cortical Substance of the Brain, aS  
well as those which form the Plexus Choroides, as is evident  
from the Dissection of Carcases.

By an Effusion of Blood in the Brain, the Secretion and Diss  
- tribution thro';the Nerves of that most subtile Fluid, which  
- conveys Motion, Strength, and Sensation to the several Parts,  
. is not only hinder’d, but the Motion of the whole Blood cir-  
culating thro'.the Brain is disturb'd and intercepted, by which  
.means the animal and vital Functions languish apace, and are  
. at last quite extinguish’d. That Matters stand thus, is sussi. .  
- ciently attested by the direful Symptoms accompanying this -  
- Haemorrhage, and by which, aS by so many diagnostic Signs, .’  
-itmay be distinguish'd from every other Disorder ; for those  
- who are seiz'd with it sail suddenly to the Ground, become  
void of all Thought and Reflection, and are depriv'd of all  
Sensation and Motion ; all their Members hecome languid and \*  
flaccid, their Tongues swell, their Eye-lids are retracted and  
immoveable, and their Mouths remain wide open ; their De-  
glutition is destroy'd, and their Excrements and Urine are often  
. involuntarily discharg’d: And all these Symptoms plainly shew,  
that the Functions of the Brain are impair'd and injur'd, and  
that the Strength and Vigour of the Muscles is consequently  
become weak and languid. -

- The other Phaenomena observ'd in Cases of this Nature are  
to be ascrib'd to the difficult and intercepted Passage of the .  
Blood thro' the interior Vessels of the Head. Thus the Cheeks rare cover’d with a red and florid Colour; the Face swells;  
itSVesseis, especially those running thro' the Temples, become  
so turgid, that sometimes breaking, they pour our Blood into  
the Mouth, Nostrils, and Ears, especially after the Death of  
-the Patient. And that when Putrefaction comes on, the Head  
-is distended to an incredible Size, which is justly to be ascrib'd  
Io the Blood’s not being allow'd a free Course thro' the inter-  
**nal** Carotids, and on that account making an Effort on the ex-  
-rental ones ; that the Eyes are distended, become prominent,  
stiff like Glass, and pour out Tears in great Abundance, are  
-Phaenomena that may be accounted for from the Lymph being  
secern'd in great Plenty from the stagnating Blood. That the  
-Palpitation of the Heart is strong ; that the Pulsation of the  
Arteries is at first great, and afterwards languid and flow ; that  
**.the** Breathing is difficult, and accompany’d with a Stertor ;  
.these are to he imputed to the Load of Blood oppressing the  
'Lungs, and their having by that means their equal reciprocal  
Motions destroy'd, and hecoming uncapable of receiving and  
expelling the Ain as they should do. In fine, that Vomitings  
and Convulsions, accompany’d with Grinding of the Teeth,  
happen, is to he accounted for from nothing else than the Blood  
lodg'd in the Veffeis of the Dura Mater, and exciting Spasms  
in it. -

Now as every Haemorrhage presupposes such a Congestion of  
Blond as is sufficient to produce a Rupture in the Parts where  
it happens; fo 'tis certain, that this must be the Case with  
Haemorrhages of the Brain. This is plainly prowd, by the Na-  
ture of all the antecedent Symptoms ; the principal of which  
are, a dull and heavy Pain of the Head, especially os its hinder  
Part, accompany’d with a Vertigo, like that which attends a  
Fit of Drunkenness, an unequal formicating Pulse, the Sight  
sometimes obscur'd, and sometimes flashing or sparkling ; wa-  
tering and swell'd Eyes ; Noise and Ringing of the Ears ; a  
certain Heaviness of Memory and Genius ; profound Sleep,  
attended with the Incubus, and troublesome Dreams j a Tur-  
gidness of the Jugular Veins, and a preternatural Redness of  
the Face.

But farther, as in order to bring a Congestion of Blood upon  
any Part, hefides the Abundance of the Blood itself, a strong  
- Propulsion *cis* it by the Spasms of some other Part, and a cer-  
tain Weakness and Debility in the Part, admitting the Con-  
gestion, are necessary; so we have no Reason to doubt, but  
these Causes concur to bring on that Congestion which happens  
in the Vessels of the Brain : For Reason informs us, and Expe-  
rience confirms to us, that all the antecedent and procatar-  
ctic Causes of this Disease may be reduc'd to these now men-  
tioned.

- To begin then with the too great Quantity of Blond ; it is  
entirely owing to it, that Haemorrhages of the Brain happen  
most frequently to People arrived at Maturity, and, according  
*taHippocrates, Aph. qy. Sect.* 6. from the fortieth to the sixtieth  
Year of one's Age, when the Growth or increase of the Body  
being at an End, the Juices are not only treasur'd up in the  
Vefleis in a greater Quantity than they should be, but also  
become thicker. Hence it also happens, that such as are of  
**whet** we commonly call sanguine Constitutions, as also sat Peo-  
ple, and those who lead a delicate, idle, and sedentary Life, or  
indulge themselves too much in Sleep, are very subject to these  
fatal Haemorrhages. That this Misfortune also happens to those,  
who either thro' a Diminution of their spontaneous Haemor-  
**rhages, or an Omission Os then long-accustom'd, artificial Eva-**

cuations os Blood, have acquir'd and treasured up, as It weed,  
too great a Quantity os is, isabundantiy plain from the ObserA  
rations os Physicians. That this Disorder arises from accuse  
tom’d Evacuation os Blood being neglected, may he’ seen irI  
*Acta Medica Vratisi..* I7C2. That it may proceed from an  
Haemorrhage os the Nofe being suppress’d; is plain from Hisu  
*danus. Cent. p. Observat.* 2. That a Retention os the Hae-  
morrhoidS has brought it on, may be.sound in the Writings os  
*Hippocrates, Amaius,* and *Zacutus Lusitanus.* ‘ For this Effect  
also. *Lenocist de Mdertib. Subit,* ought, above all others; to he  
consulted. The Writings os *Fcntanus,* and the *Acta Nat.  
Curios,* are full of Instances of this Distemper’s arising from the  
*Menses* and *Lochia* being suppress’d. And *Hildanus, Cent.* 3s  
*Observat.* I2. gives us an Instance os its being produced by .  
the MenfeS being discharged at the Mouth and Nose, instead  
of the natural Way.

But a Redundance of Blood will contribute more readily and  
more effectually to the bringing on this Disorder, if another  
Cause, that is,- Spasms’ in some Of the external Parts remote  
from the Head, should’happen to act in Conjunction with it ;  
for this latter Cause operates in fo terrible a manner, aS not  
only to stop the Progress of the Blood, ’ by bracing up the Fit.  
bres, and constricting the Veffeis of the Part affected, but also  
propels the-Blood in such a manner, that it rushes to some  
other Parts with an Impetus, fills their Veffeis, distends, and  
at last bursts them. But the Hardness and Largeness of the  
Pulse, which plainly bespeak a Stricture of the Nervous Coats  
of the Arteries, evidently shew, that Spasms accompany almost  
every Haemorrhage, as well as this os which we are treating.  
The preceding Coldness os the Extremities, as also that sort of  
tingling Sensation which some seel in their Limbs,' is likewise a  
collateral Proof of this Truth. For this Reason also we have  
just Reason to think, as, indeed. Experience testifies, that  
Haemorrhages of this Rind are often incident to those who  
have been long subject to Spasms, especially of the Abdomen,  
that is, those who have been afflicted with Colic Pains, espe-  
cially the spasmodic Kind, Hypochondriac Disorders, Pains from  
the Stone in the Bladder or Gall-bladder, or a long continu'd  
. Series of Coshveness.

From what has been said, we may also farther conclude,  
that every-thing which has a Tendency to excite Spasms, is to he  
rank'd among the Causes which produce this Distemper..’ The  
Effects os the Passions of the Mind are very remarkable, with  
regard to this Particular, especially os Anger and Dread, which  
act immediately upon the nervous Parts, and, by bringing ano-  
malous spasmodic Motions upon them, render the Circulation  
of the Blood irregular, and frequently produce this Disorder, as  
amongst the Writings of marry others may be seen in those of  
*Hildanus, Schenckius,* and *Forestus.* Tlie same Effect may  
be produced by the Heat of Venereal Rage, which destroying  
the due ./Equilibrium of the several Motions, the Blood has in  
some heen put into such an unnatural Commotion, that they  
have died Apoplectic, and, as it were, thunder-struck, in the  
very Time os their fatal embraces. For further Satisfaction in  
this Particular, the Reader may consult *Honrie. ab Hecrs, Ob.,  
servat.* IS. and *Bartholin.* (See VENUS).

A Violent Commotion of the Body, as well aS of the Mind,  
contributes also Very much to produce a Congestion of Blood  
in the Head ; and among other instances of this Kind, I my-  
self knew a Violent Cough excited by a small Piece of Breed  
getting into the Aspera Arteria, which brought on an Hiemor-  
rhage os the Brain, and prov’d the Patient’s Death.

When that acrid, corrupt, and’almost poisonous Matter, for  
wise and salutary Purposes, secreted from the common Mass of  
vital Juices, in order to be propell'd to the Surface os the Body,  
either retreats inwardly of its own Accord, or is rcpell'd by ex-  
ternal Injuries, it is os great Force, and has a direct Tendency  
to bring on this Disorder; because, by entering the internal  
nervous Membranes, it excites terrible spasmodic Strictures,  
by which the Blood is driven with an Impetus to the Head,  
and treasur'd op there. Thus *Wepfer* informs us, that Ibis  
Disorder has proceeded from the closing up of running Ulcera  
and Fontanels; and in the *Ephemerides Natura Curiosorum*we have Instances of its proceeding from the Suppression of a  
Coryza, Sweatings os the Feet, CatarrhouS Discharges, and  
from the striking in of the Itch. It also proceeds from repel-  
ling the gouty Humour. ’

: Astringents unseasonably and imprudently apply'd, especially  
in large Haemorrhages, produce almost the fime fatal Effects on  
the internal nervous Parts : Os this we have observed a remark-  
able Instance, describ'd at length by the famous *Schultzius, in*a Dissertation deliver'd at *Alters.,* concerning a Man who died  
of an *Apoplexy,* brought on by a rash Suppression of tire Hae-  
morrhoids.

Among the Causes of this Disorder, we may justly reckon  
the Ain itself; the unwholsome and preternatural State and  
Constitution of which is, bv *Lommius, Baglivi,* and *Lancisi,*affirm'd to have made this Disease epidemical. But what most  
of all Contributes to the Production of this Disorder is Cold,  
which, by contracting the cutaneous Fibres, and bracing up

the Vessels which lie near the Surface of the Body, forces the  
Humours to the internal Parts, and to the Head itself. **Hence***Hippocrates, Sect.* 3. *Aph.* 23. reckon'd an Apoplexy among  
the Number of those Diseases which rage in the Winter-sea-  
son. And Pise observ'd, that about the Winter Solstice, **when**the North Wind, which compresses Bedies Very strongly, and  
consequentiy raises the Mercury in the Barometer, began **to**blow os a sudden. *Apoplexies* us’d to seize People who were in-  
clin'd to them. A sudden Change os Air contributes also very  
much to excite this Distemper. We certainly very often ob-  
serve , that when a cold Northerly Wind suddenly succeeds a  
long, cold, and moist Intemperature of the Air, when the  
Winds have blown long from the West ; or also when a cold  
and constricting State of theAtmosphere suddenly succeeds a warm  
and moist State os theAir, People Very readily fall into thiSDisor-  
tier, provided these Constitution dispose them to it. Upon this  
also is built that Observation of *Amatus Lusitanus, Cent.* I.  
*Curat.* 36. in which he gives us an Account of an Apoplexy  
arising from the Body's being expos'd to the cold Air, imme-  
diately aster coming out os a hot Bath.

Among the principal Causes os this Disorder we may justly  
reckon the Weakness of the Veffeis and Membranes of the  
Brain, or a Diminution os their contractile Power ; for with-  
out this Imbecillity, neither the Abundance, nor the too quick  
Arrival, os the Blood can produce this Diforder ; but where it  
is found, the Membranes protrude the Blond with too littie  
Force, the Veffeis yield to it, the Circulation becomes flow, a  
Stagnation ensues, then an Infarction, and then a Rupture.  
This Weakness is sometimes natural, and deriv'd down to  
Children from their Parents. Hence it is, that this Distemper  
proves fatal to whole Families, Examples of winch may he  
found in *Hiefcrus, Forcstus,* and *Sennertus.* This Imhecillity  
is also adventitious, as is the Case with old Men, in whom **the**Strength of every Part decays, and consequentiy of the Head";  
for which reason they are, *cateris paribus,* more subject to this  
Distemper than young People.

Among the Causes depriving the Veffeis and Membranes of  
the Brain of their due Tone, the principal are, Gluttony, In-  
temperance, and drinking to Excess os hop'd Ales, Wine,  
especially if impregnated with the Fume os Sulphur, and  
Brandy ; for such is the Nature of these Liquors, that they  
agitate and expand the Blood, and at the same time, by that  
very means, distend the Vessels thro’ winch it flows : When  
this happens to be the Case with the Brain, the Distention  
continues, the contractile Force of its Veffeis and Membranes  
is impair’d, and a Way pav'd for a Stagnation. From these  
Circumstances *Henricus ab Heer* justly accounts for this  
( Disease heing so incident to the Inhabitants of the Northern  
Climates ; and *Lancisi* observ’d, that, generally, no habitually  
sober Persons were subject to it. The same is the Cafe with  
such Substances as induce a Stupor on theHead, such as Opiates,  
Wormwood, Hops, Tobacco, Saffron, Live-coals, the Steams  
of Must and Ale, by which, whilst the Juices are rarefy'd, and  
the Canals preternaturally distended, the Circulation hecomeS  
flow, and is retarded.

A cachectic Habit of Body, accompar.v'd with a heavy Pain  
**of** the Head, in which the Medullary and Nervous Fibres of  
the Brain are render'd flaccid, too lubricous, and depriv'd of  
their contractile and oscillatory Forces, contributes very much  
**to the** bringing on this Disorder. That this State and Disposi-  
tion os the Brain contribute very effectually, not only to an  
*Hemiplegia,* but also to a strong and sanguine *Apeplexy,* **we**know from many Instances. We have also found. Asthmatic  
People subject to this Disorder, especially, when their Dis-  
temper was fed and nourish'd by polypose Coagulations lodg'd  
in the Ventricles of the Heart, or pulmonary Veffeis. It has  
also been often observ'd, that not only grumous, but polypose  
Masses lodg'd in the Sinuses of the Brain, especially the longi-  
tudinal Sinus, and in the internal Jugulars, have produced a  
fatal Effusion of Blood in the Brain.

That *Apeplexy* which proceeds from an Effusion of Blood in  
**the** Brain, is accurately to he distinguish'd from that milder  
Species produc'd by an Extravasation of the Serum, which is  
follow'd by an Hemiplegia, and a Palsy of the whole Side ; in  
which Case Life is indeed preserv'd, but at the same time ren-  
der'd Very miferable. This Disorder happens when the Blond  
is carry'd to the Head with too great Force, and in too great  
a Quantity, but does nor burst the Veffeis ; only, in conse-  
quence of its long Stagnation, the Serum passes thro' the Pores  
of the Vessels, and sailing down to the Basis of the Brain, or  
the Sides of the Medulla Spinalis, and pressing upon it, not  
Only hinders the Secretion os the subtile active Fluid, but also in-  
tercepts its Influx into the Nerves, and by that means deprives  
one or other of the Sides of all Sensation and Motion. We must  
not forget to take Ijotice of the remarkable Difference hetwixt  
sleepy Indispositions, and that now describ'd ; for the former  
seize the Patient by Degrees, and not all on a sudden ; neither  
do they destroy Sensation and Motion, except under the imme-  
diate Paroxysm, and by reason of the Profoundness of the  
. Sleep.

**That Observation laid down by** *Hippocrates* **in his Apho-**

**risms,** *Sect. 2‘. Aph.* 32. Corresponds Very well tci **Truth, and**what we find from Experience : *That more violent Apoplexies,***such as those** proceeding from an Effusion of Blood in the  
Brain, *are absolutely incurable ; but that the milder Species,* pro-  
ceeding from a Stagnation of the Blood, and an Extravasation  
of the Serum, *admit of a Cure, though with Difficulty c* For,  
unless the Patient is relieved, and the Symptoms remit within  
twenty-four Hours aster Blood has been taken away, and other  
proper Means used, all Hopes of Recovery are lost, and, ac-  
cording to *Caelius Aurelianus,* the third Day at the longest puts  
an End to the Patient'S Life. Tins fatal Event is the more to  
be dreaded and look'd for, if the Disease seizes old Men of  
plethoric Habits, whose Strength is impair’d, and whose Brains ’  
' are weaken'd ; if it happens after a Fit of Drunkenness, or  
Violent Attention of the Mind, an Excess os Anger or Ter-  
ror, or also if it succeeds and follows immediately another  
Disease. But we are to conclude, that Death will Very soon  
be the Fate of the Patient, if the Stertor and Difficulty of  
Breathing increase more and more, if the Heart beats violently,  
and the Pulsation of the Arteries is great, hard, and unequal;  
if, when the Patient recovers a little, his Mind is nevertheless .  
unhing'd, aS it were, and disorder'd ; if convulsive Motions of .  
one os the Sides, and of the Breast itself, appear; if a cold Sweat  
break out in Drops, especially on the superior Parts of the  
Body; if the Breath itself is cold; and, lastly, if the Urine ;and Excrements come away spontaneouily.

*Celsius* advises to bleed *Apoplectic* Patients *(Attonitosfo* to ex-  
hibit white Hellebore, or to purge them. Then Frictions are  
to he applied; mild Aliments, which are not in the least sat,  
and some which are acrid, are to be used. The Patient must  
utterly abstain from Wine. *Lip.* 3. *Cap.* 26.

*Aretaus* distinguishes a true *Apeplexy from* Distempers which ι  
are nearly related to it, in this manner r

An *Apoplexy, Paraplegy, Paresis* [πἀρεσις], and *False,* be-  
long all to one Kind, as including a Defect of Motion, or Sen-' -  
sation, or both, and sometimes a Loss of Reason, or some one .  
or other of the Senses. But an *Apeplexy* affects the whole Body,  
and is a *Pals.y* [παραίλυσις] of the Senses, Reason, and loco-  
motive Faculty ; wherefore a strong Apoplexy is incapable of a  
Solution, and a weak one will hardly admit of it. A *Para..  
plegy* is a *Paresis* of Motion and Sensation, but limited to a  
Parr, as the Hand or Leg; and the *Pals.y,* universally speak-  
in|, is a *Paresis* only of Motion and Action. Is there he only  
a Defect of Sensation, which rarely happens, it is rather call’d  
*Anaisthesis* than *Paresis. Hippocrates* by saying, that a Leg is  
*apoplectic,* means, that it is like a dead Member, unserviceable  
and incurable ; for a strong Apoplexy is to the whole System, '  
what a Paraplegy is to the Leg. There is a proper *Paresis* of -  
the Bladder under an involuntary Retention or Discharge of  
the Urine. A Distortion of the Eye-lids, Cheeks’, Maxillary  
Muscles, and Chin, by a Convulsion, is called a *Saas.mus Cy-  
nicus* [κυνικὸς σπασμός]. A Resolution of the Rnees with a  
short Stupefaction of the Senses, a Fainting, and Falling down,  
we call a *Lipothymy* [λβποθυμίη]. *Aretaus crcci dsuZy* καὶ σημά  
χρονίων παθῶν. Lib. I. *Dap. η.*

*The* **CURE.**

The above-quoted Author is more distinct, with respect to  
the Cure of an Apoplexy, than any of the Antients; for which  
Reason, I shall give his entire Chapter.

A strong Apoplexy is mortal on all Accounts, especially to  
Old Persons, who are most subject to this Disorder; for therein  
no Hope, that they should survive, because they are at once op-  
press’d with the Weight of the Distemper, and the Infirmities  
of old Age. If the Patient be young, and the Apoplexy weak,  
the Cure indeed is not easy, but however ought to be  
attempted. .

The most obvious Remedy, as it is best suited to the Great-  
ness of the Disorder, is Phlebotomy, if it be exercised in a due  
Measure. But the Quantity of Blood which ought to be taken  
away is hard to he determined, since, if you take but a little  
more than the Case requires, you destroy the Patient ; for this \*'  
little Excess is sufficient to keep them alive, being the Fuel of  
Lise, and Matter of Nutriment to the Body. If, on the other  
hand, you bleed less than is requisite, you make use of a Very  
good Remedy to littie- Purpose; for the Cause still remains.  
However, it is better to offend in this Extreme ; for *is* the  
Patient seems to want it, and fome savourable Symptoms ap-  
pear, the Vein may again he open'd ; and the most proper one  
for this Purpose is the Vein on the Inside of the Cubit, which in \*  
the Lest Arm is disposed to bleed freely;

in a small Apoplexy it is to be considered, whether the Re-  
solution affects the Parts on the Right or the Left Side; and  
the Blood, in short, must be drawn from the sound Parts, as  
best disposed to bleed, and fittest to make a Derivation from the  
Parts affected. If an Apoplexy seizes a Person without a mani-  
fest Cause, we are to proceed by these Directions in letting of  
Blond ; but if it happens from a Blow, a Fall, or a Pressure,  
we are not to consider, but with all possible Speed to open a  
Vein, which has heen to some a Remedy sufficient os itself,  
and the only Means of Lise and Recovery.

If Phlebotomy he thought improper, because of the great  
Coldness, Torpor, and Insensibility, with which the Patient is  
oppressed, a Clyster is to he administer’d, which, by evacuating  
the loaded intestines, (for this Disorder is the usual Effect of a  
Crapula) may cause a Revulsion of the Humours from the Head.  
The Clyster should he acrimonious, and a Purger of Phlegm  
and Cooler; and have not only Nitre, hut half a Dram of Eu-  
phothium for an Ingredient in the usual Quantity of a Clyster, .  
with the Pulp os Coloeynth, or a Decoction of the Tops of  
Centaury in Oil or Water. The foliowing is a Very good Pre-  
paration : .

Honey in the usual Quantity, Rue boiled in Oil, 7 and  
Resin of Turpentine, with Salt instead of Nitre, and a  
Decoction of Hyssop. '

If the Patient be a little roused by this Method, have a Fever  
come upon him, or recover his Senses ; if his Pulse beats well,  
or good Signs appear in his Face, there is room for Hope, and .  
we may proceed with more Confidence. When the Strength is  
somewhat recover’d, you are to administer the Purge call’d  
*Hiera* to the Patient fasting, in its full Dose, if the Strength \*  
will permit; if not, half of it, in Hydromel. After this, let  
him be gentiy carrv'd in a Chain in a reclining Posture, often  
resting to avoid Weariness. If his Belly be loose, let it so  
remain ; if otherwise, let him drink about a quarter of a Pint  
of Water or Hydromel. If a Nausea comes upon him after.  
purging, by no means try to remove it; for the stretching of  
the Body tends to awaken and blow up the Sparks of Lise, and  
the Vomiting of Phlegm carries off the Cause of the Disease.  
The *Hiera* is a Medicine that purges the Brain, Nerves, and  
Senses; and thus I heVe said enough of Evacuations in the Be-  
ginning.

As to the rest, the Patient must be wrapt in Wool, and be  
washed all over with Oleum Sicyonium, or old Oleum Gleu-  
cinum, either of them alone, or both mixed together. And it  
will he the best way to melt a little Wax, to thicken the OHS,  
and to increase their Strength with an Addition of Nitre and  
Pepper, first pounded and sifted. Castor is a noble Remedy  
against Paralytic Disorders, is it be mixed with the before-  
mentioned Oils, and anointed upon the Parts ; but it is  
much more effectual, if drank in Hydromel, in the Quan-  
tity of half a Dram ; 'and we are to judge from the Age  
and Disposition of the Patient, whether it the proper for him  
**to** take it in a Course of several Days together. Oint-  
ments are better than Embrocations, as being more tolerable as  
well aS effectual; for they do not run about, and stain the  
BedcloathS, and it would be inconvenient for the Patient in this  
Case to have the CloathS stick to his Body ; whereas Ointments  
are melted and absorbed by the Heat, and are serviceable also  
**on** account of their continual Adhesion, when Embrocations  
**run** off The Ingredients of Ointment may be such as I **heve**named already ; and besides these.

Castor, Refin of Turpentine, Euphorbium, the greater Cen-  
taury [λεμνῆστις], Pellitory of *Spain,* of each an equal  
Quantity ; of Pepper, and Galbanum, each half as much,  
with triple the Quantity of *Egyptian* Nitre; to which add  
. as much Wax as wili make it into the due Consistence of  
an Ointment.

Cataplasms are to he apply'd to the hard and distended Parts;  
these may consist of

Linseed, Fenugreek, Barley-meal, Honey, Oil, in which  
Rue or Dill heve been boiled, the Root of Marshmallows  
out in Pieces, and boiled in Hydromel, till it hecomes of a  
wax-like Thickness; and let these Cataplasms he of an  
agreeable and soft Consistence.

. If the Patients then have little or nothing of a Fever, these are  
- the Remedies that are to be try'd, without regarding their Heat.

If there be an acute Fever, winch appears more formidable  
than the other Distemper, and threatens the Lise of the Patient,  
both Diet and Medicine, and all other Parts of the Manage-  
ment, are to he suited thereto. The Aliment therefore must be  
very thin and fiender, and easy of Concoction, and the proper  
Seasons for eating are now to be more regarded ; no Sustenance  
is to be taken before the Paroxysms during the whole Course of  
the Cure, and all Our Intentions are to be directed to the Re-  
moVal of the Fever.

If the Difease be protracted, and the Head in fault, a  
Cupping Glass must be apply'd to the back Part of the Head,  
and the Place must be well scarify'd ; for this gives more Relief  
than Phlebotomy, without any Diminution os the Strength:  
But first of all let another Cupping Glass be apply'd between the  
Shoulder-blades, without-Scarification, in order to make a Re-  
vulsion from that Cupping Glass on the Head.

Sometimes a Palsy affects the CEsophagus, which is the Part  
that can he the only Means of Relief to the Patient, as being  
the common Passage for Fond and Medicine : And the Sick is  
in Danger, not only of Famine and Atrophy, but of a Cough,  
Difficulty of Breathing, and Suffocation; for whatever liquid

Aliment you put into his Mouth Aides into the Aspera *Arteries*neither the Tonsils doing their Office by descending to depress  
the Food, nor the Epiglottis, which is in the Nature of a Lid  
or Cover to the Afpera Arteria, subsiding into its proper Pisce.  
It will be necessary therefore, hy means of a long Spoon intro-  
duced into the CEsophagus heyond the Aspera Arteria, to con- .  
vey some Hydromel, or Cremor os Ptisan, into the.Stomach,  
and so supply the Defect of Deglutination. Is the Patient lie  
at the Point os Death,. and his Neck, together with his Breath,  
seem to be condensed and closed up, we are. to treat the Neck; '  
and the Parts under the Chin, with heating Ointments and Fo-  
mentations. They who apply a Cupping Glass under the Chin;  
in order to open a Passage to the Stomach, act unflrilsully, and  
to no Purpose ; for there is no Need of a Dilatation, hut of a  
Compression of the Parts, in order to Deglutition. But a Cop-  
ping Glass dilates the CEsophagus, and by a Retraction, and  
holding the Parts at a Distance from one another, is an Enemy  
to spontaneous Deglutition : But this Part ought rather to he  
left at Liberty, that it may the better protrude the Aliment for-  
wards into the Stomach. Besides whet has been observed, a  
Cupping Glass filis the Trachea so as to endanger Suffocation ;  
and is you should apply one to different Parts os the Throat, it  
would be of no Service ; for the Multitude os Muscles, Nerves,  
Tendons, and Veins, are interpos’d betwixt the CEsophagus and  
theGlasses.

. Sometimes the Bladder, and its neighbouring Part the Rec-  
tum, become Paralytic, so aS to he incapable of discharging  
their Contents; whence they remain always full, and the Blad-  
der in particular swelis to. an enormous Size. Sometimes a .  
Palsy affects these Parts in such a manner, that they can retain  
nothing, but all runs from them as if they were dead, in this  
Case it is not safe to search the Bladder within Catheter, for  
fear of causing a Sphacelus in-that Part; or of throwing the Pa-  
tient into Convulsions. The best way is to wash the intestines  
with moderate Clysters of Cremor os Ptisan; but the only Re- ‘  
medy to he depended upon in all Palsies, whether general,, or  
of some particular Part, is an Insession in Oil. *Areteeus* περί  
θεραπ. όξ. παθ. *Lib.* I. *Cap. An*

*From* **CO ELI US AURELIANUS.**

.\_ The Cure os. the Apoplexy has been insisted on by hone of  
the principal Physicians among the Antients ; for they generally  
thought, that It was to be ascrib'd to a Palsy. *Hypocrates* alone  
*[Aphor.* 42. *Sect.* 2.] says. That it is impossible to Cure a Vio-  
lent Apoplexy, and not easy to cure a gentie one. The Abet-\*  
tors also *of* other Sects in this Case fomented the Head with  
Vinegar and Oil, and the other Parts of the Body with Wine  
and Oil, covering up the Patient with undress'd Wool. They  
likewise carefully embrocated the Head with a Mixture of Ivy,  
Mother of Thyme, and Hog’s Fennel; the acrimonious and  
astringent Qualities of which ought in this Case to be avoided.  
A Method .os Cure therefore adapted to the Nature os the Dis-  
temper is to be used. The Patient is to be lodg'd in a Place  
moderately light and warm. The Joints are to be gentiy rnbb'd ;  
and the Middle of the Head and Neck are to be cover’d with  
clean Wool. Warm Fomentations of sweet Oil are also to be  
used, and the Face is to be covered with a Sponge wrung  
out of warm Water. Warm Water is to be drank ; and  
. Mulsum is to be gradually swallow'd. Phlebotomy is also to  
be used ; nor is it necessary to wait *[ad diatriton]* till **the**third Day before that Operation he performed ; since it may  
.properly enough be done when the.Paroxysm is least Violent, or  
about Break os Day, when the Coldness and Torpor os the  
Body seem To be succeeded by a gentle Warmth: For those  
who have hurried on to Phlebotomy before this favourable Con-  
currence os Circumstances appeared, heve unawares performed  
the Operation in the Height os the Paroxysm, or, performing  
it at the time the Patients were expiring, could possibly be os no  
. Service to them ; since at that Time the weakened Body is in-  
capable os sending forth any Blood, rho' the Vein appears to be  
open'd. Abstinence is also to be used for the first three Days ;  
then hot Ointments are to be apply’d, and VaporationS by means  
of Sponges wrung out of warm Liquors ; sorbile Aliment is  
proper, or Bread infused in warm Water, or Mulsum. If the

. Patient is not costive, a common Clyster is to he injected ; and  
Cupping Glasses, with Scarification, are to be apply’d at the

’ Time already directed, that is, in those Intervals when the Dis-  
ease rages least, to the Back *of* the Head, and whole Spine.

‘ VaporationS, with Sponges, and laxative Cataplasms, are to he  
used. Then the whole Head is to he shav'd, and Cupping Glasses

‘ are to be apply'd to several Parts of it; and till the Distem-  
per abates, the Patient is only to be nourish'd every other Day ;  
but if his Strength is much spent, he may be fed daily. When  
the Disease declines. Cerecloths are to he used, and the Body  
is to be immersed and bathed in Oil, or in warm Water and  
Oil. Then Variety os Food becomes proper, sometimes Put-  
herbs, sometimes Fish, and sometimes Fowl. The Bath must  
also now be used ; a sew Apples may be eaters and Wtne may be  
allow’d. But too immoderate and excessive an Use of the .  
aheye-mentioned things is to be avoided, by reason of the Dan-

ger of the Distemper, and the Difficulty Os its Cure. *Caelius  
Aurelianus, Acus. Morb. L.* 3. Co 5.

*From* **PHILUMENUS.**

Those who are seized with an Apoplexy must he plentifully  
anointed with thin Oil. The Head is also to be anointed with  
Oil os Roses, in which Cows-parfnip has been boiled; and  
Mulsum is to be instill'd into the Mouth. Perfumes are like-  
wise to he used, such as Castor, Opopanax, or Galbanum.  
The Patient's Mouth is also forcibly to be opened, and the  
Finger, or a Feather, dipt in Oil, introduced into it, in order to  
remove any superfluous Matter that may happen to be lodg’d in  
it. The Anus also is to be anointed with such Substances as  
have a Tendency to draw forth, and dispel Flatulences. If the  
Violence of the Distemper is not abated by these means, we  
must then have recourse to acrid Clysters, with which Brine  
and Honey have been mixed. After these several Steps have  
heen taken, a Vein must be open'd. Upon which we must  
again hetake ourselves to stimulating Medicines. *Oribas. Lib.*

*Octav.*

*Galen’s* Method of Cure is much the same with that of *Phi-  
lumenus* mention'd by *Oribasius,* only it is a littie fuller, and  
more circumstantial; for he orders Attempts to be made to  
procure a Discharge of the injected Clysters by Friction of the  
Belly, and Region of the Loins. He also orders the Vein to be  
opened in the Right Arm ; and the Patient'S Pulse, the Colour  
of his Face, and his Respiration, to he carefully adverted to  
during the Evacuation of Blood ; and if no bad Consequence  
ensues, he orders Phlebotomy to be repeated ; and the Patient  
is to he excited by foetid Smelis, and by frequenti y calling to  
him. Is any Part is remarkably weakened by the Violence of  
the Distemper, he orders a Bolster of Wool, impregnated with  
*Sicyonian,* or any other rich old Oil, to be apply'd to it.

' In Cases where Blood cannot he" procured, the Patient's  
Tbroat is to he tickled, in order to bring on a Vomiting; his  
Anus is to be anointed with such Substances as draw out Fla-  
tuses, and severe Cuppings are to he apply'd to the Region of  
. his Loins for some time, and then to the Pubes and Lower  
Belly. When none of these Means succeed, he orders *Hiera*to be pour'd into the Mouth, or injected by way os Clyster.  
*If* the Distemper is complicated with a Fever, which he says  
sometimes comes on the first or second Day, and is an hopeful  
Symptom, the Fever is not to he neglected ; but if any noxious  
Matter remains in the Intestines, it is to be evacuated, if lodg'd  
near the Anus, with Clysters; if otherwise, with Purgatives,  
and especially with the Hiera of *Archigenes.* After the Patient  
is thus purg'd. Cuppings, with Scarification, are to be used on  
the Patientis Praecordia and Head; and, if any Pain is felt  
lower. Scarification is there also to be used, especially in Wo-  
men about the Region of the Uterus. The Evacuations by  
Stool and Urine must he kept free and easy, and the Patient  
must be fed dally, but sparingly, with such Foods as are light,  
warm, and cleansing. The Food in this Cose may for the most  
Part be edulcorated with Honey. *Artius, Totrabib.* 2. *Scrm. 2.****C.*** 27.

The Cure of an Apoplexy, proposed by *PaulasAEgineta,* agrees  
with these already mentioned, in the most material Circum-  
stances.- Only he is for anointing the Body with Oil impreg-  
Dated with Sulphur, and the Head with Oil of Chamomile or  
Dill, in which Cow-parsnip or Calaminth have been boiled.  
He also orders Sternutatories and ApophlegmatismS, or Decoc-  
tion of Thyme or Origanum in Vinegar, in order to promote  
**a** Discharge of Phlegm from the Mouth. If the Patient is de-  
priv'd of Speech, and if his Strength will permit, he uses Cup-  
pings, with Scarification, on the Back of the Head, and also  
on the Praecordia, is possible. Then the Patient is to have re-  
. course to Gestation in a Chair, a Sedan, or Hanging Bed; and  
after the fourteenth Day to proceed to other Gestations, and  
**use** for Aliment old APOMELI, with Crums of Bread, or  
*Alica.* After this he orders a little Hiera to be given. After  
the twenty-first Day he orders the Use os the Bath; and Wine  
‘mix'd with warm Water to be drank. The Patients ought also,  
according to him, to live on the Sea Coast if possible. *Paulus  
AEgineta, Lib.* 3. *Cap.* I 8.

Father *Malhranch* gives an Account of a Man who was cur'd  
of an Apoplexy by a great many Clysters of Coffee. And Mr.  
*' Chaplain,* Physician of *Montpelicr,* cured another who labour'd  
under the same Disorder by giving him a Grain Of Laudanum.  
*Hist, de FAcado R.* I7o2. °

Those who are seiz'd with a phlegmatic *Apoplexy,* grow pale,  
and sail into a profound Drowsiness. Their Pulse is small, they  
are reliev'd by emetse and purgative Medicines, and become  
worse after Bleeding. Hence we may infer, that some Viscid  
Substance, of a weak Impetus, and fufficientiy thick, produces  
these kinds of Apoplexies. In a sanguine *Apeplexy,* on the  
other hand, the Patient's Face hecomes red ; rhe Blood-Vessels  
Of the Head become very turgid. The Drowsiness is not Very  
great, nor the Pune *so* remarkably weak. He is also relieved  
by Venesection, and inis Symptoms are generally heighten'd by  
**emetic** and purgative Medicines. From these Symptoms we

may easily conclude, that Apoplexies of this Kind arise from an  
Obstruction of the Course of the Blood and Spirits in the Brain  
and circumjacent VeflelS.' *Baglivi.*

Agreeable to this Observation of *Baglivi* is that of Dr. *fohn  
Drummond,* in the *Medical Essays :* Suppose two Persons seized-  
with an Apoplexy; one is a full-bodied Vigorous-young Man, af-  
ter a Debauch ; the other is an- old' feeble Person, long subject  
to Catarrhs: I presume Bleeding Very plentifully must be the  
principal thing depended on for the Cure *of the first* j and that  
this Method would Very effectually destroy the other, who must  
be treated with every thing that stimulates. - \*

Dr. *Calderwood* (in ins new Method of curing the *Apeplexy)*condemns the common Method of letting Blood from any Vein,  
giving Emetics, or sharp Clysters, and applying Blisters: But  
insists much on the Advantage of Arteriotomy; and recom-  
mends Cordials in the Cure of the Apoplexy.

’Tis a Circumstance not to be forgot, that some Physicians  
assert their having learnt from Experience, that People, when-  
so Violentiy seiz'd with Apoplexies, as that no Medicines can  
possibly rouse them, have sometimes had that Effect very quickly  
produced upon them by the Application of Cauteries to the  
Body : But they are not all of the same Mind, with regard to  
the particular Part to .which the Application should be made j -  
for *Scultetus (fobs.* 34.) has directed the Application os a red-  
het Iron to the back Part of the Head ; whereas to others,  
especially *Zacutus Lusitanus,* and *Riverius,* the Space hetween  
the first and second Vertebrae of the Neck seems a Place much  
more commodious and proper for that Purpose. Some recom-  
mend the Place where the sagittal and coronal Sutures meet,  
whilst others entirely disapprove of that Practice. And, indeed,  
*Mistichelli, an Italian* Author, in a Book publish'd in his Mo-  
ther-tongue, *concerning the Apoplexy,* asserts,. That in order  
to rouse and recover from that Disorder, the actual Cautery is  
apply'd so successfully to no Parts os the Body, as to the Soles of  
the Feet. And the particular Method of burning them, on  
Occasions *of* this Nature, he endeavours to represent in Figures.  
See Tab. 33. Fig. II. Where the Places bumt are represented  
by the Letters A A, and the Cautery itself by the Letter Β ;  
but it may be of any other Form as well as Quadrangular. ’ I  
myself try'd this new Method on a Man who was Apople-  
ctic, but I could not rouse him bv ir and he soon after died,  
*Hoistcr. ;*

Since this Disorder attacks so suddenly, and is attended with  
so Imminent Danger, timely Assistance is to he called in, whilst  
there, as yet remain any Hopes of Safety. The Patient is to  
he said in a light and temperate Place in such a Posture, aS that  
his Neck may neither recline too much, nor yet he quite erect ;  
and his Feet are, above all things, to be kept warm with Fea-  
thers or Cloths. As for the Cure itself, the several Steps of it  
are to be indicated by the Causes ; and, hecause the Chief of  
these are the antecedent efflux of the Blood, which abounded  
too much in the Vessels of the Brain, the preternatural Con-  
gestion, and the Vis Matrix, or moving Force, of the Vessels  
and Membranes of the Brain, heing weakened, the Cure is to  
be directed by, and have a relation to, these Causes ; so that  
the chief intentions of Cure are to divert the Motion and Im-  
petus of the Blood from the Head, and to restore Strength to  
the debilitated and weakened Parts, that the Blood which does  
not now circulate, may again be put in Motion.

For answering the former of these Intentions, Bleeding in  
the Very Beginning os the Disorder has, in all Ages, been  
looked upon as a Circumstance of the greatest Moment and.  
efficacy, and must, in the Very Nature of the thing, be a  
choice and excellent Remedy. *Dodonaus,* aS well as *Nyman-  
Aus,* deservedly reckoned it the first and principal Step to he  
taken in the Cure, in his *Observat. Medic. Cap.* g. *Exercet.  
Pract. p. 385.* where he gives an Account os a Woman of  
seventy-two Years of Age being cured of an Apoplexy by  
Bleeding. Besides, that Nature herself points out this Step, is  
plain from that Observation of *Lancisi,* in which he gives us  
an Account of a Man of almost seventy Years of Age being  
cured os the antecedent Symptoms os an Apoplexy by a Dis-  
charge of twelve Pounds of Blood from his Nose.

But in whet Shape Blood is to be let, is not by all agreed  
upon. Some are of Opinion, that in this Case, Arteriotomy,  
or the opening of an Artery, is preferable to all other Methods  
Of letting Blood ; but the strongest Abettor of this Practice is  
*Catherruood,* who, in a small Book, written in *Englisih,* endea-  
vours to establish it by Arguments drawn from Reason and Ex-  
perience. Some *German* Physicians have given their Suffrage in  
behalf of this Practice; and, among the rest, *Loew,* of *Erlf-  
sield,* in his *Medic. Pract.* Nor indeed, does the Advice seem  
improper; 'tis only to he lamented, that the UnlkilsulnesS of.  
Surgeons, and the Novelty of the Thing, should hinder the  
Practice from becoming universal. Many recommend Vene-  
section, but differ in their Sentiments with regard to the Place,  
where the Vein is to be opened. Some order opening the Veins  
of the Arms, others those of the Forehead. Some those of  
the Nostrils, and others those under the Tongue. *Morgagni*recommends Opening the Occipital Veins *Adversi Anal.* 6.

*'. ' ’ ' ' - ‘ uri ΐ \* . - '*

jo. IoS. because these Veins pass within the Cranium, and have  
a Communication with both the lateral Sinuses. For this Rea-  
son, when they are opened, the Blood, which, they were to  
convey into the SinufeS,. in taken away ; hence-the Quantity of  
Blood, which pastes through these Sinuses, is lessened; and its  
Motion increased, to the great Relief and Advantage of the  
Patient. But because the Trunks of these Veins lie very deep,,  
and are sometimes found divided into many small Ramifications,  
be is of Opinion, that Cuppings, and frequent deep Incisions,'  
are preferable. In this manner *Zacutus Lusitanus \Med. Prine:  
Hist. Lib.* I. Hist. 33.] affirms, that he cured two Apoplectic  
Patients. But the generality os Physicians, and those the most  
. skilful, as *Severinus, Laneisi,* and *Freind,* recommend opening  
the Jugular Veins,.because,dying very near the Brain, the taking  
away some os their Contents must afford Space and Liberty for  
the Blood, impacted and congested in the Brain, to flow with,  
the greater Ease and Freedom.

\* In letting Blood, these Cautions are to be observed : Let it  
. be done as soon aS possible, before the small Arteries are so di-  
lated as.to lose their Tone, or the Brain he inundated with the  
Effusion os Blood. Let the Orifice be sufficiently, large, that  
the Blood may flow out quickly, and in a large Stream, because  
a flow Efflux is attended with no Advantage. Let the Vein  
be opened as near to the Part affected as is possible, the Arm  
for Instance, or the Jugulars: The Quantity of Blood to be'  
taken is to be determined by the Fulness of the Vesseis, the  
State of the Pulse, and the Strength of the Patient; though  
it ought always to be very large. If the Body is plethoric, if  
the Constitution is sanguine, or if the Disorder takes its Rise  
from a Stoppage of some habitual Evacuation of Blood, -let  
Phlebotomy bo ordered again and again, since *Dionis* assures us,  
that the opening a Vein seven different times, has, in this Case,  
produced happy Effects. But 'tis first to be done in the Foos,  
then in the Arm or Neck, lest by first opening a Vein in the  
superior Parts, a greater Afflux of Blood should be invited to  
the Head from the inferior Parts, and the Circumference of  
the Body.

For diverting the Afflux of Blood from the Head, besides  
Venesection, those Medicines are also efficacious, which purge  
pretty strongly. I do not mean those drastic and herculean  
Cathartics, which contain something of a poisonous Quality ;  
but those harmless and innocent opes, which only stimulate  
the nervous Coats of the Intestines to a proper Degree of Mo-  
tion, such as Sal Gemmae, *Seitz.* Salt, and Sal Ammoniac. A  
' Pretty large Dose of these is to be put into Clysters; and such  
Powders are to be added aS are proper for discussing Flatulencies,  
and corroborating the Tone of the intestines. Os which Kind  
are the Powders of Rue, Sage, Marjoram, Savory, Thyme,  
Mother os Thyme, Flowers os Lavender, Lilly of the Valley,  
*Raman* Chamomile, the Seeds also of Caraway and Dill, toge-  
ther with expressed Oiis, and Oiis of Rue, Chamomile, and  
Bays. The Clysters, thus prepared, are to he injected often, but  
not in great Quantities, lest they should not be retain'd ; they  
are also to be thrown in with a Syringe, that they may pene-  
irate the deeper, and reach the farther. Ἄ

But such Medicines as strengthen the weakened nervous Parts,  
and stimulate them into a proper Motion, and by that means pror  
rnote and further the Discussion of the stagnant Humours, are  
to be used both internally and externally. The external Ap-  
plications of greatest Efficacy are. Volatile, urinous Substances;  
mixed with Cephalics, the principal of which, in a liquid Form;  
. - is Spirit of Sal Ammoniac prepared with quick Lime, and im-  
pregnated with Oil os Rue, Marjoram, or Lavender ; and, in  
a dry Form, dry Volatile Sal Ammoniac sprinkled with the  
same Oils. These Medicines, either applied to the Nose in such  
- a manner as their Effluvia may strike the Olfactory Nerves, de  
put into the Nostrils themselves on the Point of a Feather, or  
even blown up into them by means of a Quill, prove an excel-  
Tent Stimulus, and rouse Very effectually. For the same End,  
and with the same Intention, such Substances as excite a certain  
Sense of Pain, are generally applied to such Parts of the Body  
as are of a more exquisite Sensation, especially the Soles of the  
Feet ; by which means the whole System os the nervous Parts  
is stimulated into a .due and proper Contraction. This inten-  
tion is answered by pretty hard Frictions with rough Cloths, or  
the Flesh-brush, and by the Application of Nettlesto the Parts.  
The Efficacy of VesicatorieS, in this Case, is also very great,  
'as also that of actual Cauteries, a new Method of using which  
has been described by *Dominicus Mist ic belli,* in a Treatise  
written in the *Italian* Language; and the Author's Method of  
Application is approved *os* by *Lanessi.*

\* - But if the Power of Deglutition either remains with the Pa-  
: stent, or is restored after it jo lost, spirituous and volatile Me-  
dicines are not to he prescribed internally; for these put the  
already raging Blood into a -greater Commotion, and rarefy it  
more, and are upon that Account- deservedly condemned in  
Cases of this Nature, by *Pitcairn de Circul. Sangu.* But such  
Medicines are to he prescribed as are of an analeptic, roufing, and  
discutient Quality; among which, the best and most approved  
are, fixed Diaphoretics with Cinnabar, Amber, and Nitre,

find these may he either exhibited rn forth of a Powder, with  
some proper Water as a Vehicle, os, which is still hetter, they  
may be reduced to the Form of a Potion. In the Course of  
thy Practice indeed, I make more frequent Use, and more cor-  
dially approve, of this Mixture:

Take of the Water of Lillies of the Valley with Wine, and  
of distilled Vinegar, each two Ounces; of succinated Spi-  
rit os Hartshorn, one Dram ; of Diaphoretic Antimony,  
Cinnabar, and Crabs-eyeS, each half a Dram ; .Syrup os  
Orange-peel, two Drams; mix all together; To this we  
sometimes add-a Very small Quantity of Emetic Tartar,  
to give a gentle Stimulus to the small nervous Fibres of the  
Stomach, which have an Intercourse and Communication  
with all the rest. Yet Care must be taken not to exhibit  
it in such a Quantity as to procure a Vomit.

But hecause an Haemorrhage os-the Brain is not only Very  
dangerous in itfels, but also very subject to recur after it is  
cured, 'tis the Business of the Physician to employ all his Care  
and Skill both to carry off the Paroxysm, and to prevent its  
Return. Now *Caspar Hoffman, [ Lib.* 3. *Instit. Medsol* with  
*Martianus* and *Bassonius,* rightly concluded, that all Apoplectic  
Patients were plethoric; therefore the Physician's chief Care  
must he to lessen the redundant Blood. For this Purpose letting .  
Blood is proper at all Seasons, but especially about the .Equi-  
noxes, when the Blood and Humours generally use to be in a  
preternatural Commotion, and Nature exerts her utmost Efforts  
to eliminate and throw out of the Body whatever is superfluous  
and prejudicial. For this very Reason, according to the Testi-  
fnony os *Hippocrates,* the haemorrhoidal Flux is in this Case  
salutary, and attended with happy Consequences, especially in  
those who have before had Discharges of that Kind. But first  
to procure, and then duly to promote, an hemorrhoidal Diss  
charge, are Circumstances that call for a great deal of Skill,  
Art, and Caution. For obtaining such a thing, besides Frictions  
of the Anus, and the Use of proper Fomentations, I think the  
Application of Leeches Very proper ; to which may be advan-  
tageoufly join’d a balsamic Elixir os corrected Aloes, Saffron,  
Myrrh, and Amber,. prepared not with a spirituous, hut with  
an aqueous lixivial Menstruum. - The *Balsamic Pills,* if cau-  
tioufly given, are very proper in this Case. But such Medicines’  
as provoke an haemorrhoidal Discharge, ought by no means to  
be administered, if the Patient is not disposed to Discharges of .  
that Nature ; they are only to be used when the Discharge be-  
gins to discover itself, or to flow too stowly; in other Cases  
they do more Harm than the Plethora itself, under which the  
Patient labours.

For preventing the Access of this Disorder, the due Excre-  
tion of the Fences is *os* uncommon Efficacy; sor 'tis almost a  
general Maxim in Practice, *That- a.Man cannot readily labour  
under Diseases of the Hoad, provided his Belly perform its Office  
duly.* This Discharge of the Excrements is by no means,  
however, to be procured by Medicines of too strong and drastic  
a Quality; sincethese, by operating too Violentiy upon the nerv-  
ous Coats of the intestines, excite Spasins in them, and induce  
an unequal Circulation of the Blood. This End is rather to be  
obtained by Medicines, that are mild, gentie, and friendly to  
the Constitution; among which, the most proper and efficaci-  
Ous are. Preparations of Rhubarb with abstergent Salts; as also '.  
the *Pilulae Polychresia,* and Clysters.

Those Waters and Balsams which are called *Apoplectic,* and  
by some highly extolled aS proper, not only to be taken inter-  
. nally, but also applied externally, by way of Unction, to the  
Temples, Nostrils, and Nape of the Neck, are, in my Opi-  
nion Very hurtful both aS a Cure, and a Preservative against this  
Disease, in Cases where an Haemorrhage of the Brain is dreaded,  
in plethoric sanguine Habits of Body, and in Persons in the  
Flower of their Age. The Testimony os *Dodonaus suiirp.  
'Historia, Lib.* 6.] is of considerable Weight in this Point:  
*When,* says he, *there is too great a ^Quantity of Humours, espar  
cially is. mixed with the Blood, the use of this Medicine,* that  
is, distill’d Lavender-water, *is not safe; neither is that Coma-  
position safe, which consists of distilled Wine, in which Hcrbs,  
Flowers, Seeds, and Spices of this Nature have been macerated,  
and which are rajhly and indiscriminately prescribed by most  
People, since by the Use of those hot Medicines, which stuff the  
Head, the Disease is increased, and the Patient exposed to a  
more imminent Danger.* Far safer are Infusions by way of  
Tea, prepared Of common Water and Cephalic Herbs, especi-  
ally Baum, Betony, Sage, and . the lesser Cardamoms, which,  
heing frequently supped, not only preserve an equal Motion in  
the Blood ; but alsio refresh and comfort the Train and Nerves.'

But the Recovery and Safety of the Patient are justly to he  
despaired of, unless a cautious and moderate Regimen, with re-  
gard to the Non-naturals, is carefully observed. But for Pre-  
‘Vention, in Cases of this Nature, Rest and Abstinence are o.f  
wonderful Efficacy, since, according to *Celsus, very* terrible  
Disorders may, by their means, not only he prevented, but  
cured. For this Reason, immoderate Eating, and *-Vrtiety of*

Dishes, are to he avoided; sweet and palatable Wines; all in-  
toxicating Liquors, and severe Exercises of the Body, are also  
to Be abstained from, especially aster Meals.. He who dreads  
this Disorder, should not go to Bed immediately after Supper ;  
neither should he fie with his Head too low. If the Constitu-  
tion is such, as to favour the Generation of this Disorder, the  
Body is not to he exposed to its Influences, but the Feet are  
carefully to he defended from the Cold, and sometimes im-  
mersed and washed in warm Water; and the Patient is to  
remain in a Chamber moderately warm. Gentle Motion is allo  
to be used, the Mind is to he kept calm and serene, and Sleep  
is neither to he too long, nor too short. In a word, all thofe  
things are to be carefully avoided and abstained from, which we  
heve above rank’d among the procatarctic Causes of this Dis-  
order.

Case I. -

An illustrious Count, almost fifty Years os Age, and full of  
Blood and Juices, was some Years ago afflictsd pretty often  
with a milder Species of Palsy, accompanied with a Difficulty  
of Speech. For the Cute of these Disorders be went to the  
*Caroline* Baths, which lay contiguous to his Estate, and used  
them both internally and externally. But as be did this without  
the Advice of his Physician, and had neglefted to prepare his  
Body for it by proper Evacuations, such as letting Blood, and  
Purging , it happened, that having gone into a Bath, which  
was as yet too warm, he was suddenly deprived of all Senfes,  
both internal and external. Immediately upon this Accident,  
he breathed quick, his Breast heaved with a sort of convulsive  
Motion, his Arteries beat strongly with a certain kind of Hard-  
ness, and his Face became prodigiousty red. Α Vein was open-  
ed, and a Sternutatory apply’d to his Nostrilsby which means  
a more terrible convulsive Concussion os his Breast, together  
with a violent Stertor, were brought on. His whole Lest Side  
became destitute of all Seniation and Motion, but the Hand of  
his Left Arm, being convulsed, shook continually. His Reason  
utterly left him, and, within five Hours, he died; and after  
his Death, a large Quantity of Blood, and bloody Serum, flow’d  
from his Nostrils for the Space of twenty-four Hours, or more.

REEL ET ΤΙ ON.

If any of the Mineral Waters, ufed by way of Bath, require  
Prudence and Circumspection in their Use, the *Caroline*. certainly do; for these are of such a Quality as strongly  
to centrad the Surface of the Body, and drive the Blond  
. and Humours to the internal Parts, by that earthy, cal-  
careous, and even chalybeate Principle, with which they  
. abound. And this is the very Reason why they so speedily  
carry off oedematous Swellings of the Feet, and bring on,  
. if the Body is fubject to Spasms, and the Vessels turgid  
. with Blood, violent Pains, vehement Palpitations of the

Heart, acute Pains of the Head, Loss of Strength, Weak-  
ness of the Joints, and even contioued and intermitting  
. Fevers. We need not therefore wonder, if in this illustri-  
.. ous Person, whose Mass of Blond was already too large, and  
. whose Humours were even thus, disposed to stagnate in the

Brain, the Blond was, by a rash and inconsiderate Use of  
the *Caroline* Waters, driven with an Impetus to the Head,  
and both its internal and external Vessels burst ; a Circum-  
stance which could not fall to cause the immediato Death  
; of the Patient. This is plainly proved by that large and co-  
. pious Effusion of a bloody Matter from his Nostriis, which  
. always sufficiently discover a previous ihemorrhage in the  
. Brain. And since his Stertor and Difficulty of Breathing in-  
creased upon the Application *of Sternutatories;* this should  
teach Physicians to be wary and circumspect in applying  
: such things aS promote Sneezing in sanguine *Apoplexies,*

and that too even after the impetuous Monon of the. Blond to  
the Head is allay’d, lest the Blood should rush with too  
. great Violence to the stimulated Parts, and hasten the Death

of the Patient.

C **A s Ε IL**

A Gentlewoman of fifty Years of Age, of a sanguine, but  
at the same time of a very delicate and tender Constitution,  
had always bad her monthly Evacuations in a very plentiful and  
copious manner. But about the forty-ninth Year of her Age,  
this Discharge happening according to the Course of Nature to  
stop,-she hegan to complain much of anUneasiness and Streight-  
ness about her Praecordia, an inflation in the Left Side of het  
Abdomen, a painful and flaccid Stato of her joints, a vertigi-  
nous and heavy Pain of her Head, and unsound and inter- .  
rupted Sleep, tho’ her Countenance all the while remained very  
.florid and ruddy. The Winter at fast approaching, all these  
Symptoms were so heightened, that the was reduced to a Ne-  
cessity of calling a Physician, who, in order to discussi ber Flatu-  
lencies, prescribed her *Volatile oily Salts,* and *Carminative Ese  
sences.* He likewise ordered her a purging Powder, comisting of  
half a Scruple of Resin of Jalap, and six Grains of vitriolated

Tartar. With which after she bad purged sin times, and that  
nut without terrible Gripes, the was next Night seized with  
an *Apoplectic* Fit, but her Pulfe remained in its ordinary State,  
and her Breathing was free. For her Rellef, a Vein was forth-  
with opened, and an acrid Clyster injectid, by which means  
she was indeed recovered from her *Apoplexy*; but an *Aphony,*and a great Weakness of her Head, still remained with her.  
Her Physician, in order at once to carry off these Symptoms,  
and the Remains of her other Distemper, ordered her a purg-  
ing Powder of twelve Grains os Resin of Jalap, and ten Grains  
of vitriolated Tartar, to he taken in Water of Lillies of the  
Valley as a Vehicle. But scarce an Hour aster the taking of  
this, the *Apoplexy* return’d, and kill’d the miserable Patient:

REFLECTION.

Women of sanguine Constitutions are, upon the Cessation of  
their monthly Evacuations, very much inclined to an *Apo-  
plexy,* and therefore stand greatly in Need of Venesections,  
lest, by the Concurrence of other Causes, the Disposition  
should break forth into the Distemper itself; and, indeed,  
if any thing is effectual for making it do so, it is undoubt-  
edly the Use of the stronger Purgatives, and such Medicines  
as excite Gripes. Among which wo may, for its many fatal  
Effects, justly reckon that pernicious Medicine *Resin of Ja-  
lap* exhibited in Powder; for, when taken into the Stomach,  
it easily runs together, and adhering to the Folds of the ner-  
vous Coat of the Intestines, it quickly excites Spasins, and  
painful Teofrons, by which the Blood is forced to the supe-  
rior Parts, and produces the most fand Effects. Henue ’sis  
plain, that the Physician committed an egregious Blander,  
since upon the Approach of a gentle *Apoplexy,* which remitted,  
he repeated this Purgative in so large a Dose, as not only to  
bring on a Relapse, but even Death. And though the in-  
tention of drawing the noxious Humours to the inferior Pans  
does not at all feem inconsistent with a rational Practice, yet  
it ought to be done by rnlld Laxatives, or even Clysters, and  
not by such Medicines as induce sensible Spasins on the In-  
testines, which may he discovered by the Gripes, and by  
. that means force the Blood to the Head in fuch a Quantity,

that it bursts the Vessels, and produces present Death.

**CAsE** IIL

A certain Divine of a great Chara ole r, not quite fifty Years  
old, of a florid and sanguine Constitution, and who had always  
enjoyed a found and vigorous State of Health; by means of a  
certain Accident, which hurt his Character and Reputation, fest  
into a violent Perturbation of Mind, accompanied with Sadness,  
and the most uneasy Senfations. Being thus disturbed, and  
steening *very* little, he thought proper to chear bis Mind, and  
dispel his Melancholy, by a pretty liberal Use of Wine, which  
indeed he loved too much before, in Process of Time he lost  
his Appetite for Fond, and bis Digestion heing very bad, he was  
troubled with continual Eructstions without any Discharge of  
Flatulencies from his Belly, which was costive; his Strength  
began to he impaired, he was feixed with a terrible Pain and  
Streigbtnefs about his Praecordia. and, mournful and distracting  
Thoughts unhinging bis Mind, at last, be fuddeuly and unex-  
peoledly fell down with the total Lost of his Senses, bis  
Posse and Respiration remaining at the same time entire. But  
about two Hours, after proper Remedies heing applied, his  
Strength returned in some measure, and be came to himself;  
but began to complain terribly of a Weakness in his Knees, a  
Torpor and Languor of bis Right Side, and a Lossof Memory.  
Of his own Accord he went to the *Caroline* Baths, not only  
with a View to carry off his hypochondriac Disorder, but also  
to banish from his Mind all melancholy and perplexing Thoughts  
by the Journey and Conversation. As I was in the Place, he  
earnestly asked my Advice, and I ordered him to drink mode-  
rately of that temperate Spring, commonly called *stAublen..  
Brannen,* which he ufed with great Success for about twenty  
Days. But in his Return home, when he was passing through  
a noted Town, being invited to a splendid Entertainment hy  
.his Friends, he indulged his Palate, and drank too much Winer  
And going home in the cold Night Ain, he began to complain  
of an Uneasiness and Difficulty of Breaming; upon which he  
took some diaphotetio Powders, by the Use of which, a red  
Purple Fever began to appear almost over all his Body. But,  
complaining of an insupportable Pain of his Head, his Pbysi-  
cian judged Venesection in the Foot proper, and, taking my  
Advice about the Propriety of this Step, I declared myself  
against it, for fear of striking the Purple Fever back to the in-  
ternal Parts. But the Physician insisting much on the bad  
Consequences that might attend the Negledt of Venesection,  
it was accordingly performed in the Foot, and a sufficient  
Quantity of Blood taken away. Soon after, the Uneasiness  
about his Praecordia increased, the Extremities of his Body be-  
came cold, and, the Purple Fever disappearing, a violent *Apo.  
plectic* Fit unexpectedly ensiled, accompanied with the Loss of  
all his’Senfes, Stertor, a strong, and unequal Pulse, and a red

arid tumid Countenance-; by the Violence of which Disorder  
this seamed and ingenious. Clergyman was, in eight Hours  
time, convey'd into another World.

REFLECTION.

There are many Circumstances in this Case, the Observation of  
which may be os Use for directing a Man in the pathologic  
and therapeutic Parts of Physic: And, first, we may observe,  
'that in a Man of a sanguine Constitution, when to long and  
excessive Sorrow, a bad Regimen, and especially the iinmo-  
derate Use of Wine, are joined, the nervous System may he  
so weaken'd, as to induce hypochondriac Symptoms of such a  
Nature, as would nor have otherwise, in all Probability,  
seiz'd a Constitution of that Kind. It is also to be observed,  
that by a long-continued, perplexing, and uneasy State of  
-Mind, accompany’d with Sorrow, the Brain and nervous  
System may he so weaken’d, as to become disposed and sub-  
ject to *apoplectic* Fits. Besides, in the Case now under our  
Consideration, the first Fit was flightest and most gentie,  
fince it proceeded only'from the Blood being forced to the  
Head from the lower Belly, by means of the Spasms there  
excited, and might have heen soon carried off byVenesection,  
winch would have resolved the Bleed stagnating in the Vessels  
of the Brain; But because no Indisposition is more apt to  
recur than an *Apoplexy,* especially *if it* is not averted and  
guarded against hy a due Regimen, and proper Medicines;  
hence it happen'd, that a due Regimen not being observed,  
after the Use of the *Caroline* Baths, which are indeed excel-  
lent in hypochondriacal Cases, but Very improper in Disor-  
ders of the Head, a more Violent Fit ensiled, which, in the  
present Cose, proved fatal to the Patient; which was un-  
doubtedly owing to the large Quantity of Blood taken away,  
by which means the Matter of the Purple Fever heing struck  
into the internal Parts with great Violence, excited such  
Spasms. aS forced the Blood impetuously to the Head, and at  
last broke its Veffeis internally. *Hoffman, Fob.* 2;

**CASE IV.** *From* **C. Piso.**

One *Claud Dionis,* a Citizen and Taylor of *Pont-d-mous.on*in *Lorrain,* a Man of a (lender Make, black Hair, and, like  
the Generality of City-tradesmen, accustom’d to Idleness and  
high Feeding, happen'd in the Year 1603. after a Debauch of

- Wine, to drop down suddenly, and lose all Sense and Motion:  
He at that Very time became speechless; but his Respiration,  
tho' it continued with him, was nevertheless unequal, disor-  
der'd, and intermitting, tho' not high, and accompanied with  
8tertor. After he had thus remain'd speechless for four Days,  
and was concluded *Apoplectic* by every one who saw him, he  
at last recover'd on the fourth Day; rather, I suppose, by  
the peculiar Interposition of Heaven, than by the Influence of  
Medicines, which, in Cases of this Nature, either cannot be  
exhibited at all, or, if exhibited, generally produce no Effect,  
on account of the Oppression under which the sensitive Facul-  
ties labour. But tho' the Patient recover'd thus sar, the morbi-  
fic Matter was nevertheless, by a salutary Tranflation, deposited  
not only on the Middle of the Spine, by which Accident the  
Trunk of his Body became paralytic, but also on those Branches  
of the Seventh Pair of Nerves which run to the Tongue, by  
which means a Stammering in his Speech still remain'd. His  
Palfy.was, by proper Care and Warmth, so far remov’d, that a  
few Months after he was able to go abroad, and stand at the

. Church-doors, in order to receive the Charity of tender-hearted  
Cbristians : But about a Year and a half after,. when this mise-  
rable Creature had lost the Use os bis LimbS, and betaken him-  
self to his Bed, he was soon cut off by a Fever, the particular  
Nature of which I know not. .

**CASE** *V. From* **Co Piso.**

In the Year I6O3. about the Beginning of *September,* a cer-  
tain Citizen and industrious Tradesman of *Pont-a-mousen,* hap-  
pening to return drunk from a neighbouring Town, dropp'd  
down in the Middle os his Journey, lost all Sense and Motion,  
and lay prostrate On the Ground for three Days: However,  
heing found on the third Day, and carried home, he indeed reco-  
ver'd his Senses, but at the same time lost tho Power os moving  
the middle Part of his Body, and his Right Side; nor is the  
Use of these Parts as yet restor'd to him, tho' four Years are  
now elapsed fince that Symptom appear'd ; hesides, he hesitates  
.in his Speech, and walks with Difficulty. 'Tis also to be oh-  
served, that, in this Patient, the paralytic Parts were always  
moist with Sweat.

**CASE VL**

. I remember, that about ten Years ago, on the Confines of  
the Bishoprick of *Metoc,* a Lady of Distinction, the Wife, if!  
rightiy remember, of Mr. *Helmostas,* became paralytic after an  
Apoplectic Fit; which returning some Months after, put a final  
Period at once to her Palsy, and her Lite.

The Duchy os *Lorain* is, indeed, so Very fruitful in Disor-  
ders of this Kind, that there are few of its Towns or Villages,  
in which the remarkable Changes of Weather, that happen du-

ring the Winter-seafon, do Hot suddenly and unexpectedly strike  
and cast down some of the Inhabitants in this sudden manner.

But whether the frequent Surfeits *of* the Inhabitants, or the  
damp and moist Nature of the Climate and Ain, produce this  
Disorder separately; or, winch is more probable, whether they  
concur, and join their united Forces on this Occasion, are Disqui-  
sitions I shall not, at present, enter upon ; neither shall I launch  
out into the more abstruse Theories relating to this Disorder,  
and its several Symptoms, fince these Things have already been  
fet in a Light sufficiently clear. I shall therefore only observe,  
that there are three Species of Apoplexy; a Very strong and vio-  
lent one, which instantaneously suffocates and kills the Patient;  
one of a milder Nature, which renders the Patient's Respiration  
Violent, difficult, and high, and which is by some distinguish'd  
into two Sorts, differing rather in Degree than Nature; and one  
of a Very flight and gentie Kind, in which the Patient breathes  
with some Labour and Difficulty; The first of these, or the  
most Violent Kind of ail, proceeds from a mucous Humour,  
either alone, or more frequently intermix'd with Serum, but in  
such a Proportion, that rite former much exceeds tho latter:  
The flight and gentie Kind, on the other hand, proceeds froni  
Serum, either alone; or intermix’d with a very small Quantity  
of Mucus; so that the former may predominate much over **the**latter. The intermediate Species proceeds from a Mixture of  
both of these, almost in an equal Quantity : And, indeed, this  
Theory is confirmed by the following Observation:

**CASE VII.**

About the Year 16O0. *Stephen Ruisseau,* the Son of a noted  
Advocate, and a Youth about twelve Years of Age, about the  
Winter Solstice, suddenly dropp'd down without any Sense  
or Motion, except a convulsive one, which soon aster seiz'd  
him, and which was immediately follow'd by a Stertor. IH  
this Case we try'd very few Medicines, because we concluded  
the Patient irrecoverable: Accordingly he was suffocated by the  
Violence of the Distemper, about twelve Hours aster it had  
seiz'd hint.; and, to the no small Surprize of all who saw him,  
died discharging a mere, but frothy MueuS from his Nostrils in  
large Quantities, and not Drop by Drop, which is the Case in  
old Disorders of the Lungs; *so* that we had no Reason to  
believe, that it came from his Thorax: For altho' those who  
labour under a Peripneumony may, by the Violence of the  
Stertor, discharge a purulent Matter from their Nostrils, yet  
that Matter is not frothy, nor yielded in great Plenty; but is of  
a pretty good Consistence, and domes away Drop by Drop;  
This Circumstance is, perhaps, owing to the Length and Accli-  
Vity of the Way thro' which it has to pass, and the Agitation of  
its Parts ceasing sooner than in the mucous Humour flowing  
from the Head.

I also know, that an Apoplexy may arife not only froth Con-  
oretions of Blood in the Head, but also from the Blood being  
rendered too liquid: Thus, I heard of a certain Person who  
dropp'd down Apoplectic, and died on the Spot, in Consequence  
of his hanging his Head down, and steeping before a Fire. And  
about three Years ago, I myself saw the Son of *Arnulphus  
Richards,* when, on the Day of Intermission in a Tertian Fe-  
ver, he had exposed himself for some time to the scorching  
Heat of the Sun, during the Dog-days, suddenly become Apo-  
plectic, and that to such a Degree, that he died the following  
Day. *Carol. Piso. Observat. Selecti*

*From* **BOERHAAVE.'**

In an *Apoplexy* the Patient is suddenly deprived of the Exer-  
cise of all the Senses, both external and internal, and of Volun-  
tary Motion, whilst the Pulse, which is generally strong, re-  
mains, together with a laborious and deep Respiration, attend-  
ed with a considerable Elevation of the Breast, with a Stertor,  
and the Appearance of a profound and perpetual Sleep.

A Multitude of the most accurate Observations have made it  
appear, that this Disorder arises from wherever Cause is capable  
of preventing, either totally or in part, the Influx of the ner-  
vous Fluid, secreted in the *Cerebrum,* to the Organs of Sense  
and voluntary Motion, and the Reflux of the same Fluid from  
the aheve.mention'd Organs to the common Sensory in the  
Brain; whilst the Progress, and perhaps the Return, of the  
Fluid, supply'd by the Cerebellum, to and from the Heart, **and**Organs of Respiration, is preserved in a Degree sufficient, **to**support, in some measure, their Functions.

All these Causes, aS observ'd and deliver'd by Authors, may,  
for the greater Perspicuity, he reduced to Classes ; in the first of  
which may be reckon'd,

**i.** The natural Make of the Body: Thus; when the Head is  
naturally large, the Neck short, and, as it sometimes happens,  
consisting only os six Vertebrae, whereas there ought to be seven,  
this Structure disposes to an *Apoplexy,* aS it favours the Conge-  
stion of Blood and Humours in the Head. Thus also, is **the**Body is corpulent and sat, the capillary Arteries in general will  
he subject to Compressions; and, in Consequence thereof, **a**greater Quantity os Blood and Humours will flow into the Ves-  
sels which convey them to the Brain. Thus also, a plethoric  
Habit, and a Redundance ns nit nitons Humours in the Blood-

lay *a.* Foundation for the Stagnation Of the Juices, and a sub-  
sequent Rupture of the Vesseis in the Brain.

2. To the second Class helong all those Causes which induce  
such a Change in the Blond, Lymph, and nervous Fluid, as to  
render them incapable of circulating freely thro' their respective  
Vessels in the Brain. Amongst these are.

Polypous Concretions in the Carotid or Vertebral Arteries,  
whether form'd originally about the Heart, or within the Cra-  
nium ; which are discover’d by a Palpitation of the Heart, an  
unequal Pulse, a Vertigo, and temporary Loss of Sight, often  
recurring, and which are increas'd by Motion or Heat.

An inflammatory Siziness of the Blood, which may **be**known by an acute continual Fever, a Phrenitis, a considerable  
inflammatory Pain in the Head, which heve affected the Patient  
some time before the Attack os the *Apoplexy ;* Add to these, all  
those Signs which evince, that the Blood, upon being prevented  
from circulating duly in the Vesseis of the Brain, in Consequence  
thereof, is carry'd in greater Quantities, and with greater Force  
than usual, thro' the external Branches of the Carotids; whence  
a Redness, Fullness, and Inflammation of the Eyes, Face, and  
Neck, together with an involuntary Discharge os Tears.

A thick, glutinous, pituitous, and stuggish Disposition of  
the whole' Mass os Blood ; whence old People, those who are  
much subject to Catarrhs, whose Constitutions are cold and  
moist, and who are pale and leucophlegmatic, are Very subject  
to *Apoplexies. ,* It is not difficult to presage *an. Apoplexy* from this  
Couse, as it is generally preceded by an universal Listleffness,  
and Duiness of thedienses; Sleepiness ; Inactivity, with respect  
to all manner of Motion; unufual Slowness os Speech ; Tre-  
mors, Stertors, Incubi f *Night-mares)* ; Paleness, Turgidness,  
Humidity, and Dimness of the Eyes; frequent Discharges of  
pituitous Humours by Vomit; Vertigos; Shortness of Breath  
upon the least Motion, with a Compression of the Cartilages of  
the Nose. Such a State of the Blood is produced and increased  
by all the Causes related under the Article LENTOR, which  
fee.

3. To the third Class belongs whatever compresses the Arte-  
ries themselves, or the nervous Vesseis of the Brain, so as to  
prevent a free Circulation of their respective Fluids through  
them.

People who are plethoric, that is, full of Blood, and bloated  
with bad Humours, are much subject to this Species of Apo-  
plexy; especially if extraordinary Motion or Heat increase the  
Velocity of the Circulation. Hence it is apparent, that the  
Disorder must he promoted in such Constitutions by high Feed-  
ing, and spirituous Liquors; Medicines which are acrid, and  
excite the Motion of the Blood, such as Cardiacs, Volatiles,  
and Emetics; by excessive Heat and Motion; and by Intense-  
ness of Thought, especially if long continued, and frequently  
repeated, because this determines a more copious Flux os Hu-  
moms towards the Brain.

All Tumors also arising within the Cranium properly helong  
*to* this Class, whether they are inflammatory, purulent, serous,  
pituitous, steatomatous, scirrhous, or bony, provided they com-  
press the Arteries, or the Venous Sinuses near the *Torcular  
Herophili,* or the medullary Origins os the Nerves, or the  
*Medulla* of the Cerebrum itself

To this Class also belongs too great a Velocity of the Blond  
in the Vesseis of the Head, determin'd to that Part by some  
impediment to the Circulation of the Blood in the Arteries of  
the inferior Parts, which may arise from an infinite Number of  
Causes.

Hither also may be referr'd all Compressions, from whatever  
Cause, of the Veins without the Head, which convey the reflu-  
ent Blood from the Contents of the Cranium towards the Heart:  
AS also Effusions of Blood, Pus, Ichor, or Lymph, which press  
externally upon the *Dura* or *Pia Macer.*

An To the fourth Class belong all those Causes, which, by  
any means, so dissolve the Texture of the Arteries, Veins, or  
Lympheducts belonging to the internal Part of the *Cerebrum,*aS to cause an Extravasation of their respective Fluids, which  
then press upon and injure the Medullary Origins of the Nerves  
os the *Cerebrum.* Such, for Example, are an acrimonious  
Serum in hydropic and leucophlegmatic Cases ; a Redundance  
of Blood in a Plethora ; an atrabilariouS Acrimony prevalent in  
melancholy, scorbutic, and arthritic Constitutions, which fre-  
quentiy produces an Apoplexy, and usually operates betwixt  
the fortieth and sixtieth Years of. Lise: Now, all these may re-  
main latent in the Constitution for some time; but, upon being  
excited by adequate Causes, they frequentiy are productive of a  
fudden Apoplexy; winch may he foreseen, by comparing the  
Materials subsisting in the Constitution with the Causes capable  
of exciting them to Action, which are principally Violent Affec-  
tions of the Mind, and intense Studies ; to winch, perhaps,  
imprudent and excessive Venery may be added.

5. Some Sorts of Poisons, winch are suddenly deleterious,  
may he rank'd in the fifth Class ; but these may either he  
reduced to the second, third, or fourth; or may be more pro-  
perly said to act upon the Lungs than the Brain. Amongst  
these are, the Fumes os Mineral Sulphurs, of Charcoal, and that

*Gas Syluestris,* or incoercible Spirit, which exhales from Vege-  
table Juices, during Fermentation.- S . 1 - .. . !

The Anatomical Inspection of Bodies which have died of  
*Apoplexies,* and the historical Observation of such Circumstances  
as occur in the Treatment of such Cases, furnish us with a  
Knowledge os these Causes; and a due Reflection upon these  
naturally leads us to a Distribution of them into the preceding  
Classes, which are admirablyadapted to the Investigation os **the**best Methods os Cure.

*See the Observations and Historiis in this Article.*

Hence it appears, that *Apoplexies* are produced by various,  
and those opposite. Causes; and therefore they may he proper-  
ly enough distinguish’d into *fanguinious* and *pituitous* ; tho' this  
Distinction is far from being perfect, since, besides these, **there**are *serous, atrabilarious, polypous,* and other Species of *Apo-  
plexies.*

The Part affected, in a perfect *Apoplexy*, is the entire *common  
Sensory* in the Brain, but in a *Parapoplexia* some Parts of **the***common Sensory,* which are more compress'd than the rest ;  
whilst the Cerebellum and its Dependencies remain, in the Be-  
ginning of the Disorder, unaffected. - '

Now as the *Cerebrum* supplies the Instruments *os* Sensation,  
and Voluntary Motion, with their Portions of the nervous  
Fluid; and aS the Heart and Organs of Respiration are furnish’d  
from the Cerebellum, the Reason is obvious why the Pulse and  
Respiration remain, whilst the Senses and Voluntary Motion are  
destroy'd ; and why even the Pulse and Respiration increase, in  
proportion as Sensation and Motion decline; for it generally  
happens, that the nearer the Patient is to Death, the greater is  
the Pulse and Respiration, which is to be accounted for thus:  
When there is a considerable Obstruction in the *Ccrebrurn,*the usual Quantity of Blood cannot circulate therein; and as  
the same Quantity is still brought ’ by the Carotids from the  
Heart, the remaining Part of that winch should circulate thro'  
the *Ccrebrurn,* must now circulate thro' other Parts of the Head:  
Hence an Inflation and Redness of the Cheeks, and Foaming at  
the Mouth, caused by a greater Quantity of Fluids circulating  
thro' the Branches of the external Carotids ; and because a  
greater Quantity of Blood is determin'd, by this Obstruction  
in the *Cerebrum,* to the Veffels of the Cerebellum, a greater  
Quantity of Spirits must be there secreted ; and aS these Spirits  
are subservient only to the Vital Functions, the Pulse and Respi-  
ration must necessarily increase.

The Violence, therefore, and Danger of an *Apoplexy,* is to  
he estimated by the Age, Constitution, and Make os the Patient,  
by the Vehemence os the Symptoms, and principally by **the**absolute Privation of the Senses and Voluntary Motion, by a  
strong and profound Respiration, attended with a Stertor, by  
Plenty of Viscid Froth about the Mouth, by a slight cold Sweat,  
which sticks in Drops upon the Skin, by its being consequent to  
a former flight *Parapoplexia,* or a Violent Epilepsy, or any other  
Vehement Cause.

On the contrary, an *Apoplexy* which is moderate, and admits  
of a Cure, may be distinguish'd by the Slightness os the Sym-  
ptoms, and **the** Absence of those Accidents above enumera-  
ted.

If a copious Sweat, winch is equal all over the Body, dewy,  
warm, and which relieves the Symptoms, supervenes in a flight  
Apoplexy, it resolves the Distemper ; for by this the stagnating  
Mattes, winch obstructs the Nerves destin’d for Sensation and  
Voluntary Motion, is carry'd out of the Habit, being first atte-  
nuated by the Vital Powers.

The same salutary End is accomplish'd by a plentiful Dis-  
charge of thick Urine, and for the same Reasons.

The morbific Matter is also carry'd off, and the Distemper is  
cured, by a large and long-continued hemorrhoidal Discharge;  
and, in Women, by a Restitution os the Menstrual Flux.

The Disorder is also removed sometimes by a Diarrhoea; and  
a violent Fever supervening, especially in the Beginning of the  
Distemper, attenuates and removes the obstructing Matter, dis-  
poses it to Elimination, and by these means sometimes restores  
the Patient. A flight Fever, however, not sufficient sor the  
Attenuation and Removal of the morbific Matter, is of had  
Presage: But a Fever seems principally of Service in that Spe-  
cies of *Apoplexy* which is caused by a Viscidity of the Juices,  
because Attenuation is more wanted here than in the other  
Sorts.

When the Cause of a somewhat more severe *Apoplexy* is in  
some measure removed, the Distamper is changed into a Palsy  
of some of the muscular Parts ; of one entire Side, which is  
call'd an *Hemiplegia*; or of all the Parts helow the Neck,, which  
is call'd a *Paraplegia.* These are said to happen during the four  
first Days, and seldom admit of a Cure, and always impair the  
Memory’, Judgment, and the Power of Voluntary Motion\*:  
Hence the Patients remain for ever after heavy, dull, pusillani-  
mous, and are affected with Tremors, and frequent Vertigos.

A perfect *Apoplexy,* wherein the *Ccrebrum* ia much injur'd,  
the Fluids are corrupted, and the Cause of the Disorder is pro-  
pagated to the *Ccrebellum,* soon terminates in Death, and sel-  
dom exceeds the seventh Days

'And it is a Maxim laid’ down by Authors, that -if an *Apoplexy*remains unresolv’d heyond the fourth Day, the Patient dies,  
unless reliev’d by a Violent acute Fever, before the seventh. -.

An *Apoplexy* may be foreseen, first, from the natural Consti-  
tution, Frame, .and Make of the Patient., , '

secondly, from a Knowledge os the predisposing Causes, or  
Materials in the Blood and Juices, capable os producing the  
Disorder, when excited to Action.

Thirdly, from the Procatarctic Causes, which are those  
which excite the predisposing Causes to Action.

All these have been already speoisy'd.

Fourthly, from the first Effects of these Causes, as a Tre-  
mor. Vacillation, Vertigo, temporary Loss of Sight, Stupor,  
unusual Sleepiness, Depravation os Memory, Ringing in the  
Ears, Inflation of the superior Parts,.Respiration more profound  
than ordinary. Compression of the Pinnae of. the Nose, and a  
frequent Incubus. .........

What has been said above, will enable us to know an Apo-  
plexy when it occurs, and to distinguish its different Degrees. .

As to the Cure and Prevention of an Apopleky, no universal  
Rules can be laid down ; for as the predisposing and exciting  
Causes, together with the Parts principally affected, are various,  
the Method of Relies must also vary; and must he attempted  
hefore the' Disorder grows inveterate, otherwise it will be diffi-  
cult to do it with Success.

If, therefore, an *Apoplexy,* from a glutinous; inert, cold  
Cause, is foreseen from the Signs above speoisy’d, the Intentions  
must'he directed, first, to avert the Pressure of the glutinous  
Juices from the Head.. .

Secondly, to attenuate the glutinous Viscidity in the Brain,  
and in the whole Habit. ~ ' .

The Pressure on the Veffeis of the Brain is diminish'd,  
’. First, by a Derivation of the Humours to other, and those  
opposite Parts. ' ........

Secondly, by universal Evacuations. '-...ι.

A Derivation of the Humours is effected by Vapours, Fo-  
mentations,' and Baths, apply'd to particular Parts, to which it  
is intended the Humours should he invited ; by Suction, with  
Cupping Glasses ; by Sinapisms, and Vesicatories, among which  
Cantharides are os great Importance, as they both invite the  
Humours to the Part where they are apply'd, and attenuate at  
the same time ; by Caustics, Issues, Setons, and Frictions;  
by Ligatures made upon the large Veins of the Feet, Legs, and  
Thighs. To these may be added Collations, Gargarisms, and  
Masticatorios, winch excite a Discharge of Saliva, and Apo-  
phlegmatisms apply'd to the Mouth,. Fauces, and Nose.

*Boerhaave,* in his *Materia Medica,* gives the following  
Forms:

Take of the Roots of Masterwort, Pellitory of *Spain,* Ga-  
langals, each an Ounce ; of the Leaves of Origanum,  
Rue, Thyme, each an Handful; os the Flowers of La-  
vender and Feverfew, each an Ounce ; of the Cortex  
Winteranus, six Drams : Boil these in a close Vessel, in  
a Quantity of Water sufficient Tor three Pints of strain'd  
Liquor; to which add of Spirit of Sal Ammoniac, three  
Ounces. Let this be used as a Collation or Gargarism.

Take of Mastich, white Wax, and Ginger, each an Ounce;  
and make them up into small Troches; which inust be  
chew’d in the Mouth by way of Masticatory;

Universal Evacuations are procur'd by strong Emetics and  
Cathartics, exhibited in sufficient Doses; by Scarification and  
Bleeding; tho' the Efficacy of these is not always Io he de-  
pended on.

Proper Forms of Emetics and Cathartics recommended by  
*Boerhaave,* are as follows:

Take of Emetic Wine, two Ounces and an half; simple  
Oxyrnel, an Ounce: Mik for a Vomit.

Take of Emetic Tartar, seven Grains; for a Dosw

Take of the express'd Juice of Horse-radish, an Ounce ;  
simple Oxymel, two Ounces: Make a Draught.

t ....

Take of Mercurius Vitae, two Grains: For a Dose.

Take of Diagrydiuin, Resin of Jalap, each ten Grains;  
rectify'd Spirit of Wine, two Drams: Let them be Care-  
fuify rubb'd together, till the Diagrydiuin and Refin are  
- diflolofd; and then add Solutive Syrup of Roses, with  
Sena, six Drams; Make a purging Potion.

As th Bleeding in this Species of Apoplexy, some Anthers  
advise it, others oppose it; for my own part, I think this  
should be determined by tho Fullness of the general Habit, and  
Quantity of Humours to he evacuated; so that the Sagacity and

Prudence of the Physician must suggest to him Reasons for di-  
recting it, or omitting it.. ... ' . . 2.

Aster these Derivations and Evacuations, the Lentor or glu-  
tinous Viscidity of the Juices in to be'attenuated and dissolv'd by  
Remedies adapted to that Purpose. Amongst these, a Regimen  
with respect to Aliment cannot be of any great Effect in curing  
*an Apoplexy,* because there is not sufficient Time for it to ope-  
rate; but for the Prevention of one it may he of singular Use:  
It ought therefore to consist os both solid Foods and Liquids,  
-which have lad ', their natural Viscidity perfectly destroy'd by  
Fermentation, and 'which are seasoned with Salt and Aroma-  
tics ; this supposes them ro be of Vegetable Substances, hecause  
no other will ferment, properly speaking. Salts of all Kinds  
are here of Service, because they stimulate the Solids, and ex-  
cite the languid and almost stagnating Juices to Motion, the  
ready Means for their Attenuation. For the same Reasons arol.  
mafic Vegetables, and these essential Or chymihal Otis, are here  
of Importance ; on which Account the *Balsumum Apapiecticum,*describ'd at the End os this Article, has been in great Esteem,  
but seems to have grown into Disuse thro' its frequent Misap-  
plication ; for all these stimulating Remedies are tapable of pro-  
ducing great Mischiefs, in Apoplexies, from a real Extravasa-  
tion, a distending Plethora, or an inflammatory State of the  
Blood. Broths made os Fowls may be also allow'd, because  
they are Destroyers of Acids, which are great Promoters of  
Coagulation and Viscidity.

Adding Strength to the Vessels and Viscera,' increasing the  
Motion of the Fluids, diluting, resolving,, stimulating, bilious,  
and saponaceous Medicines, Frictions, Heat, Baths; and Vest-  
eateries, all contribute to the Attenuation of the glutinous  
Viscidity above mentioned. These are more fully treated of.  
under the Article LENTOR, which serf. \_ ,

These, however, must he used with great Care and Caution,  
because most os them may be productive os great Evils, herd in-  
crease the Disorder they are intended to cure, if apply'd at’ an  
improper Season, that is, without previous Derivation and Eva-  
chation, or suffer'd to act with too much Violence.

External Topics to the Head, which stimulate, evacuate, or  
resolve, are not to be omitted. But of all Remedies, Blisters  
raised thy Cantharides are os the greatest Service:. ' sc so

In case an *Apoplexy* from this Cause is already form’d, it sel-  
dom admits os a Cure. However, the Remedies above-men-  
tioned should be try'd ; and every thing that is likely to excite  
the Senses should be apply’d to the Nose, Mouth, .and Head ;  
the most acrid and stimulating Remedies are to be used and  
Stoois must be procured by acrid Clysters. *Celsius* directs white  
Hellebore, one of the most stimulating Medicines we are ac-  
quainted with.. ;

*Boerhaave* specifies the following Fornis:

Take of" Tincture of Castor, and Spirit of Sal Ammoniac,  
each two Drams : Apply this frequently to the Nose.

.Take of the sharpest Vinegar, and Tincture os Castor, each  
two Drams i Apply this in the same manner.

Take of the Chymical Oils of Rosemary, Tansy, Lavender,  
Rue, Wormwood, each four Drops; Tincture of Castor,  
a Dram ; Nerve Ointment, an Ounce ; Sal volatile oleo-  
sum, a Dram : Min, and snake a Balsam. . Let the Va-  
pour of this be received into the Nostrils; and let the  
Temples be rubb'd with it.

Take of the Pulp of Colocynth, half a Dram ; of the Leaves  
of Tobacco, a Dram and an half: Boil these in a sufficient  
Quantity of Water for ten Ounces os strain'd Liquor ; to  
which add of Sal Gein two Drams; \* Make a Clyster.

*From* **FULLER.**

I

Take of the Root of Pellitory of *Spain,* half an Ounce; os  
the Leaves of . Rue, two Handfills ; of the Pulp os Coloil  
cynth, ay'd in a Rag, half a Dram : Boil these In a Quan.:  
\_tity of Water sufficient for twelve Ounces os the strain'd  
Liquor; to .which add of the Infusion *of Crocus* Metallo-  
rum, three Ounces; Tincture of Castor, half an Ounce;  
Oil of Amber, Sal Gein, each two Drains: Make A  
Clyster: - - ἐν

It must, however, be confess'd; that the Disorder, is frea  
quently increased by all these intended Remedies, the Motiori  
of the offending Matter being augmented, and mote strongly  
impell'd upon the affected Parts, by every thing which stimua  
lates’: Mean time the Strength would be too much impair’d by  
farther Evacuations. Hence appears the Reason, why, in pro-  
curing a Dissolution of the glutinous Juices, all possible Regard  
is to he paid m. Evacuation and Revulsion. - - Hence also it is  
evident, why Bleeding, if it d0es not relieve, destroys the  
Patient.

. But if by the Signs above mentioned it is perceiv'd, that an  
*Apeplexy* is threaten’d, by an inflammatory Siziness of the Blood ;  
by a Plethora, or Rarefaction of the Blood or by too great a  
Velocity of the Blood in the Head, determined thither by any  
Cause whatever, immediate Recourse must he had to such Re-  
medies, as most expedifiousty evacuate, resolve, and avert the  
Blond from the Head.

I. Therefore let a considerable Quantity of Blood he taken  
from the Jugular Veins by a largo Orifice ; and let this be re-  
peated as Occasion requires. By this the Patient is generally  
much reliev’d immediately, if the Case is such as will admit os  
a Cure. See ARTER1OTOM1A.

2. The next Step is to give a considerable Dose of an Anti-  
phlogistic Purge, which must he repeated in such a manner,  
that an almost perpetual Diarrhoea may be excited; and if these  
Cathartics do not exert their Effects soon enough, their Opera-,  
tion must he promoted by acrid Clysters.

Antiphlogistic Purges reoomfnended by *Boerhaave* are:

Cream of Tartar, in the Quantity of six Drains.  
Crystals of Tartar, in the same Dose.

Crude Tartar, in the same Dose.

Sal Polychreston, in the Quantity os five Scruples.

Pulp os Tamarinds, in the Quantity of three Ounces.  
Tamarinds, in the Quantity of four Ounces.

Rob of Eider, in the Quantity os four Ounces.

. Rhubarb, in the Quantity of a Dram and an half.

Take of choice Rhubarb, a Dram ; Sal Polychreston, thirty  
Grains; Syrup of Succory, with Rhubarb, an Ounce:  
Mik these well together ; and then add of Elder-flower  
Water, two Ounces ; small Cinnamon-water, two  
Drams. Make a purging Potion.

. Take os choice Pulp of Cassia, two Ounces; Crystals of  
Tartar, three Drams : Mix these, and let the Patient take  
a'Dram every quarter of an Hour, till he purges suffici-  
ently. .

Take of the Leaves of choice Sena, with the Stalks, two  
Drams; of the heft Agaric, a Dram ; of choice Tama-  
rinds, two Ounces : Boil these for a quarter of an Hour  
in a close Vestel, in a sufficient Quantity of Elder-flower  
Water for five Ounces of the strain'd Liquor; to which  
add of purily'd Nitre, a.Dram ; solutive Syrup of Roses,  
with Sens, six Drams. Make a purging Potion.

Take of the Leaves of Sena, three Drains; Tamarinds, two  
Ounces; Agaric, three Drams: Boil for a quarter of an  
Hour in a Quantity os Water sufficient for one Pint of the

- strain’d Liquor ; to which add Syrup of Succory, with  
Rhubarb, an Ounce. Let the Patient take an Ounce  
every half Hour, till it purges him.

Forms of Purges somewhat stronger, and more stimulating:

Take Of Agaric, two Drams and an half; Sal Polychreston,  
a Scruple. Mix for a Purge.

Take of the internal Bark of Elder, or Dwarf-elder, an  
Ounce: Contuse this with a sufficient Quantity of Rain-  
water ; then boil them a little, and press out four Ounces  
of the Liquor, which administer for a Purge.

. Take Of Agaric, two Drams ; Leaves of Sena, three Drams ;  
Root of Mechoacan, a Dram ; Tamarinds, two Ounces .  
Let these Ingredients be cut and bruised, and then mace-  
rated in a sufficient Quantity of Rain-water for haff an  
Hour; then boil gently for seven Minutes; and to nine  
Ounces of the sham'd Liquor, add os Sal Prunellas, half a  
Dram; solutive Syrup of Roses, with Sena, nine Drams.  
Let the Patient take an Ounce every half Hour, till he  
purges briskly.

. Take of the best *Syriac* Scammony, thirteen Grains; Dia-  
phoretic Antimony, a Scruple; solutive Syrup of Roses,  
with Sena, six Drams : Let these he mix'd well together,  
and then add of distill’d Succory-water, half an Ounce.  
Make a purging Potion.

*Bocrhaaue,* however, in these Cases, recommends in a par-  
ticular Manner Tamarinds, and Sena.

3. Besides these, during rhe whole Course of the Cure, the  
Patient must be kept strictly to the Use of such Medicines aa  
refrigerate, dilute, attenuate, and excite Urine. For these di-  
minish the Velocity and Motion of the Blond, whereas all sti-  
mulating Aromatics increase them, and consequentiy the Dis-  
order.

Proner Forms for this Purpose are, according to *Bocrhdaus,*those winch follow:

Take Os the Leaves of Wood-sorrel, three Ounces; of Mal-  
lows, an Handful and an half ; of Oats unhull'd, an  
Ounce: Boil in a sufficient Quantity of Whey to twelve  
Ounces; to which add the Y olks Of two Eggs; Rob of  
Currans, an Ounce: Of this let the Patient drink fre-  
quentsy..

***A* CLYSTER.**

Take Os the fresh Leaves Of Endive, Succory, Fumitory,  
Mallows, Marshmallows, each an Handful: Boil these in  
a sufficient Quantity of Whey for ten Ounces of the  
strained Liquor. Let this be administer'd twice or three  
times a Day. .

4. Mean time perpetual and strong Revulsions must be made  
by the Means specisy'd above, till the Cure is completed.

5. With respect to Aliment, the Regimen must be extreme-  
ly thin and antiphlogistic. See INFLAMMATIO.

6. AllMedicineswluchstimulatestrongly, or excite the Motion  
Of the Blond, or Heat, must be industriously avoided ; as also  
external Heat; and the Patient must not he suffer'd to he in  
Bed, especially in a recfining or supine Posture, but must be kept  
erect. Narcotics are in all thesc Cases esteemed prejudicial. .

If an *Apoplexy* from this Cause is already form'd, a Cure is  
seldom to be expected ; the Remedies, however, above fpeci-  
fy'd, are the Only probable Means of Relief.

That Species of *Apoplexy* which is caused by Juices extraya-  
sated betwixt the Cranium and Dura Mater, or betwixt the  
Dura and Pia Mater, from a Wound, Contusion, Fracture,  
Or Suppuration, is treated of under the Article CAPUT, which  
see.

That sort of Apoplexy which is caused by an extravasation  
of Humours in the internal Cavities of the Brain, scarcely ad-  
mits of any Cure, because it generally proves Very soon fatal:  
But is any Relies can he obtained, it must be, first, from empty-  
ing the Veffeis by copious Bleeding and Purging, which must  
be repeated, provided the Symptoms are alleviated by the  
first; for by these means Room will be made in the evacu-  
ated Veins for the Absorption of the extravasated Humours,  
which may possibly be imped'd into them by the Vital Powers.

Secondly, from correcting at the same time the prevailing  
Acrimony and Viscidity of the Juices, by Remedies adapted to  
the particular Kinds *of* them..

That Species os *Apoplexy* which is caused by an Extravasation  
of redundant Lymph, more readily admits of a Cure, by briik  
Hydragogue Purges, to winch must he added Topics which  
dissipate or draw off a Part of the abounding Lymph, amongst  
which the principal are large VesicatorieS, which must he kept  
running a considerable time : Besides these, the Regimen must  
be drying, and Sinapisms, Issues, and Setons, are to he made  
use Os as Occasion' requires. In this Species Bleeding is perni-  
cious, and must therefore he omitted.

- This Species of *Apoplexy* fo frequentiy occurs, that some Au-  
thors have erroneoufly treated os all *Apoplexies,* as' arising from  
an Extravasation of Lymph.

No Remedies have yet been taken Notice of by Authors, for  
*Apoplexies* caused by Poisons, or polypous Concretions in the  
large Vessels.

*Apoplecticum Bals.amum.* Apoplectic Balsam.

. Take the distill’d Oil of Cinnabar, Cloves, Lavender, Le-  
mons. Marjoram, Mint, Rice, Rosemary, Sage, Rho-  
dium, Wormwood, of.each twelve Drops; Amber, six  
Drops ; Bitumen Judaicum, two Drams; Oil of Nut-  
megs by Expression, one Ounce ; Balsam of Pens, a suffi-  
cient Quantity to make all together into a smooth  
Balsam. \_ .

This warms and enlivens the Nerves, being either smell’d to.  
Or rubbed upon the Temples, or any other convenient Parts..  
**It** does much Good also to paralytic Limbs, by rubbing them  
well with it. It has been in mighty Esteem and Fashion to  
wear in little Ivory Boxes and Cane Heads ; but it has in such  
respects given place to more modish Contrivances. In Distem-  
pers of the Head and Nerves, it is likewise directed to be given  
inwardly from three to fix Drops, in a Bole or Electuary.  
*LIluincsis Dis.pmsiatory. ^ . .*

APOPNIXIS, ἀποπνιξις, from ἀποπρίγω, to suffocate.  
Suffocation, apply’d particularly to Hysterics. These Suffoca-  
tions were by the Antients thought to proceed from the  
Uterus.

APOPSYCHIA, ἀπβψυχία, from ἀπὸ, signifying Privation,  
and ψυχήν Sonl» Lise. The greatest Degree of Lipothymy.  
**See LIPOTHYMIA.** *Castellus.*

APOPTOSIS, ἀποπτωδις. *Erotian* explains it hy τῶν ozrr-  
δόσμων ἀστἱοις, " the unloosing of a Bandage ; ” in which Sense  
it is the fame as AFoLYsIs.

APORIA, ἀποεία. The same as ALYsMUs, which see.  
Ἄπορον νήοημα, in *Hippocrates,* is a doubtful Disease, or sirch  
- a one as endangers the Life of the Patient.

APORRHAIDES, ἀπόῤῥἀῖδες. Purple Fishes with Prickles.  
*Castellus.* A soft of Shell-fishi . .

APORRHIPSIS, ἀπόῤῥιψις; from ἀποῤῥίπτω, to throw away  
with Precipitation. A precipitate casting away. Ἀποῤῥίψιες  
. ιματίων, in *Hippoc. de rat. Vict'. in More, a cut.* is, " a  
\*" precipitate Throwing off the Cloaths,” as it is customary for  
delirious Persons in the Height of a Fever:

.. APORRHCEA, ἀποῤῥοια, of ἀποῤῥέω, to stow from. A  
Defluxion, or influx ; also a Contagion, Pollution, Effluvium,  
Morbofe *Apocrine.* See AFOcRrsis, **CONTAGIUM, EFFLU-  
VIUM.** *Castellus.*

~ APORRHOE, ἀποῤῥοὴ, signifies a Defluvium,- or Falling  
off, as ἀποῤῥοὴ τῶν τειχών, is " a Falling off of the Hair:”  
See ALOPECIA.

APOS. A Bird thus distinguish’d t .

Apos, Offic. Aldrov. Ornithi a. 698. Bellon, des Oyfe,  
377. Joof. de Avib. 84. Gefn. de Avib. 500. *Apes major,*Charlt. Exer. 96. *Hirundo, Apus,* Raii Omith. 2I4. Ejufd.  
Synop. A. 72. Men Pin. I78. Will. Omith. I chi THE  
BLACK MARTIN, OR SWIFT.

V It lives with us in *England* during the Summer. See APO-  
DES. ...... Ἀ . . . .

These, on account of their habitual Exercise and Fond,  
which is of Infects, abound much with volatile Salts, and an  
exalted Oil. They are said to be good for Epilepsies, for  
weak Eyes, for nephrrtio Pains, and for the Colick:

APOSAEIS, άποσαοῦς, is explain’d in *Galen’s Exegesis,* by  
ἀποσβενσοῦς, that is, -extinguished.

APOSCEMMA, or APOSCEPSIS, ἀποσκημμα. η ἀπό-  
σκηψις, from ὀἀπόσκηπτω, a Veth, importing, among other Sig-  
nifications, to remove hastlly, in order to a new Settlement.  
. Α violent Influx and Settlement of Humours translated from  
one Part to another, *Galen, Lib.* 2. *ad Glausonem.* This is  
sometimes critical, and owing to the Strength of Nature, as the  
same Author observes, Ζία περὶ τοῦ ςνρογινώσκειν. He calls also  
by the Name of αιποσκίμμάτα, those excrementitious Parts of  
the .Body, which are deposited in the Alvus, whereby the  
other Parts are reliev’d from their Load of Humours. Ἀποσκηψβς, .  
' in *Hippocrates,* are the fame as οἱποσκημμάτα, or the Settlement  
of Humours, and sometimes the Transmutations or Transitions  
of Diseases, as *Apla* 56. *Lib.* 6. Έςτἀδε ἀποκίνδυνοι ἀιἀποσκη-  
, ψβς, “ are in Danger .of, or liable to thefe Transmutations; ”  
by which Passage, which otherwise would be obscure, he hints,  
that Diseases owing to Melancholy are subjeol to make Trans-  
itions into Apoplexres, Convulsions, Madness, and Blindness.  
Ἀποσκιίψειί, *ms Hippoc. Lib.* **I.** *de Morb. majore,* as quoted by  
*Galen,* is explained by him in *Exeg.* by ἐνπτσιοάσβς, that is.  
Scarifications.

APOSCEPARNISMUS, ἰἀπόσκεπαρνισμὸς, from σκέπαρνος,  
an Ax, is a kind of Fractirre of a Bone, when a Piece of it is  
cut off, as a Chip from a Block with an Ax. Such a Wound  
is infiictsd by a Side-blow, with a sight . and sharp Weapon.  
*Castellus.*

APOSCHASIS, APOSCHASMUS, ἀπό'γαςης, αιποχασμος,  
. from αποχάξω, to scarify. Scarification, and a flight superfi-  
cial Incision in the Shin. Ἀποχᾶν, and ἀπόοχάσαι, in' *Hippo-  
crates,* signify, to pierce, cut, scarify; and in *Lib.* **I. et a.***de Morias,* denote Piercing, or Opening, as apply’d to a Vein;  
as, .Τί φύσιν *sofi rdi φλίβαί Tas ὑπὸ* τφ γλώασιι *lumgula.* " First  
" open the Veins under theTongue. ” And, τΓουτου ξυμφέρει τὴν  
φλέβα αιηοχάσαι τὴν ἐν τί χειρὶ, τὴν σπλιινίτιν καιομένην, η τὴν  
ἡπατίτιν. " It would be convenient for the Patient to open  
" theVein in the Hand, call’d tbeSplenetic, or HepaucVein. ”  
- Ἀποχάσαι is expounded in *Hifychius* by φλεβοτομοῦν, and in *Va-  
riant* alfo by διαγήσαι, to diflecti

APOSIGESIS, ἀποσίγησις, from ὀνετσιγἀω, to be silent. Α  
keeping Silence. Πρίς τάς απτσιγησίας ἐνθυμημἀτικοι, *in Hippo-  
crates uri* ἐνι&ημ. is very differently understood by Interpreters.:  
Some render it, " sharp and prompt in making pertinent An-  
" fwers ; ” others, " grave and sententious in answering. ”  
One understand by the Phrase, " a Mind obstinately bent upon  
" Sllence; ” another,"" angryand vehement againstsuch as hold  
their Peace. ” Foesius takes it in the first Signification,  
for "" acute and prompt in answering; ” in which Sense, he says,  
**it** will best correspond with the preceding Clause, πρίς τάς άνα-  
τασίας σιγητικοἰ, which be tranflates, “ silent (that is, patient  
\*" and modest)' in hearing the Objections of Opponents. ”

APOSITIA, αοασιτία, of ἀπό, from, and σιτίον. Fond. The  
same as ANoRExIA, which fee.

APOSITICA, ἰἀπόσιτικἀ, in *Hippocrates* are expounded in  
*Galen's Exegesis,* by αιποσιτιας καὶ ανορεξίαστ ποιητικἀ, such  
Things as cause a Loathing and Aversion to Food. ”

APOSPASMATA, αοπσπἀἀματα, of ᾶοπσπἀω, to draw off,  
or separate; Α Name by which *Galen, Lib. de Ceastit. Act’.*halls those Solutions of Continuity; which are in-the organical  
Parts. In the Beginning of *Lib. 4. Meth. Med.* he calls the  
violent Solutiori of Continuity in the Ligaments ἀπ'σπασμα,  
as be does that in the Vesseis and Muscles by the Name of  
ῥίίγμα and δλἀσμα. In his *Comment.* 3. in *Bib. Zam ιή]ρ. he*telis us, Thet *Hippocrates* calls by the Name of ἀπσπάσματα,  
-the rending afimder those Parts which ferve to unite aind knit  
together the Bones.

. APOSPHACELISIS, ἀπόσφανοῦλισις; from σφἀκελος; aMor-  
tisication, in *Hippocrates,* is a Sideration or Mortification of  
the Flesh in Wounds or Fractixres, which is caused by too tight  
a Bandage. , '

APOSPHAGE, ἀπόσφαγὴ, from to fl auctiter as

a Victim. Butchering, cutting the Throat.. *Hippoc. apiidurri  
iiijeex.* According to *Pollux, szeapi* is the Throat, καὶ τὸ ν.οιλον  
οὗ διεστᾶσι άι κλοῦδες, " and the Cavity between the Clavicles.  
*Foestur. ; —------- .*

APOSPHAGMA, ἀπόσφαγμα, is expounded by *Galem,*τὸ τρυγῶδες όσαρίβημα, "" the feculent Straining, ” which is  
also called ὑπόσφατμα; *Aposphagma* also, according to *Pliny*and *Athenaeus,* signifies the Blood thet flows into the Vessel set  
tinder the Throat of a staughter’d Beast, which was reserv’d for  
the Preparation of several Sorts of Food.

APOSPHINXIS,' ἀπόσφιγξις, from ἀπόσφίγτω, of σφίγτω, **to**strain or streighten. A Sfreightening , the Word is ofed by  
*Hippocrates,* in several Places, to express the Constriction or  
Streightening of a Fillet in Bandage:

APOSPONGISMUS; ἀπσπογτισμὸς, is the using of a  
Sponge, either dry, or dipt in Water, for the deterging of  
Filth, easing of Pain, taking off Itching, refreshing the Spi-  
rits, *etc. Castellus.*

APOSTAGMA, APOSTALAGMA; ἀπόσταγμα, ἀπόστἀυ  
λαγμα, from ἀπόστάξω, and ἀπόσταλάζ'ω, to distil. That sweet  
Liquor which distils from the Grapes before they are trodden ;  
it is alfo, on account of its singular Sweetness, called γλευκος,  
and by forne *Protropum. Castellus. .*

APOSTASIS, ἀπόστασις, from ἀφίστημι, to abfcede. An Abst  
cess. SeeABscEssUs.

Besides this common Acceptation of the Word, there are  
other Significations of it to be met with in *Hippocrates,* where-  
of two are most remarkable ; one is, ἀπόστασις κατ’ ἔκρουν, η  
κατ ἔκκρισιν, an Apostasis by Effiux; or Excretion, ” when  
the Distemper leaves the Patient, and passas off by forne Inch  
Way, as by an Outlet. The second is call’d an ἀπόστασις κατ’  
ἀπό'θεσιν, an Apostasis by Settlement, ” when the morbific  
Matter by its own Weight falis upon a Part, and there lodges  
and fettles. Thus, *Galen, Com.* 8. in *Lib.* 6. *Epide slasj.ior.ti.  
iortuafftti iveapla majiv in. iorli urio)? sso’ ‘Mer* ἀπόθεσιν, ἀλλά  
κἀπί ὄ^ι” ἐνιεκείσεως ὀνομἀζοντα. " We often find him applying  
**“ the** Term *Apastafis,* not only- to .Things deposited in any  
" Part, hut- to those which are discharged by Excretion. ”

*Hippocrates* also uses ἀπόστασις for the Transition of one Dis-  
ease into another; as *Lib.* I. *Epid.* ’ESi δ’ οις ἐνο ὀλίγοισιν ἐξ  
ἄλλων πυρεὑίΓ καὶ νοσημάτων ἀπστἀσιες ἐστ τἐταῥταίκς εγένοντἐν  
" Many of the other Fevers and Distempers underwent an Al-  
" teration, and passed into Quartans. ” Here *Galen* on the  
Place expounds ἀποστασις hy μετάστασις.

APOSTAXIS, ἀπόσταξις, of ἀπόστδ᾽ω, from στάξο», to distil.  
A-Distillation is generally used by *Hippocrates* to signify a Dr-  
stillation of Blood from the Nose ; sometimes it means any Di-  
stillation or Deflexion.

APOSTEMA, ἀπόόσημα, from ἀείστημι, to abscede. The  
same as ASscBssus, which fee.

APOSTEMATIAI, ἀπόςηματίαι: *Aretaeus, Lib.* I: de  
*Cause et Sig. Chron. Cap.g.* calls those, who, labouring under  
an inward Abscess, void Pus downward, ἀπστίματϊαι, as he  
names those who discharge it by Expeeloration, ἔμπυοι  
*(Empyi). , '*

APOSTERIGMATA, ἀπόστηρίγμάτα, from ἀπόστηρίξω, to  
fupport or prop. It signifies whatever Things are used for a  
Stay and Support to any weak Part, without Tying or Bind-  
ing, as Pillows, Bolsters, *etc. to* the Head, *Gal. Corn.* 3. in  
Κατ’ ἰὑτρειών. In *Hippocrates, Lib. de Flat,* ἀπόστηρίγμά/α is  
generally supposed to mean such Diseases as are confirmed and  
deeply rooted in the intestines.

s APOSTOLORUM UNGUENTUM. The Ointment  
of the Apostles. It is thus prepared;.

Take of Turpentine, Rosin, Wax,. Gam Ammoniacum,  
each fourteen Drams; Roots of long Birthwort, Oliba-  
num, Bdellium, each six Drams , Myrrh, Galbanum,  
each half a Dram ; Opopanax, three Drams ; Verdigris,  
two Drams ; Litharge, nine Drams ; Oil, two Pounds *i*Vinegar enough to disiolve the- Ammoniacum, Opopa\*  
nax, and Galbanum. Digest the Bdellium, Galbanum,  
Ammoniacum, and Opopanax, twelve Hours in the VI-  
negar upon hot Ashes ; then make them boil, and when

' they are throughly melted, strain them, and, with a gentle  
Heat, reduce them to the Coofrstence of Honey, to  
which, whilst warm, and the Turpentine. The Li-  
tharge being supposed in the mean time to he levigated,  
A grind it in Part of the Oil by - a gentle Fire ; after which,  
add the rest of the Oil by Degrees, in which melt the  
Wax, and the Rosin grofly beaten. Being remov’d from  
the Fire, mix therewith the Gums hefore prepared ; then  
the Birthwort and Myrrh ; and, lastly, the Frankin-  
cense and Verdigris reduc’d to Powder., Stir it continu-  
ally with the Spatula, till it comes to the Consistence  
. of an Ointment..

It takes its Name from the Number of its Ingredients,  
which answers to thet *of the* Apostles, bring Twelve, except  
the Oil and Vinegar. It is vulnerary.

APOSTRACOS OSTEON, ἀπόστροικὸς ἱστίον, from οστροεκον,  
'a Shell, in *Hippoc. de Vainer,* is a Bone dry’d to soch a De-  
gree as to become a mere Shell.

APOSTROPHE, ἀπστροφὴ, from ἀπόστρέφω, to torn away,  
in iP. *Aiginet. Lib,* 3. *Cap.* 37. is a Loathing and Aversion to  
Fond.

*, APOSYRMA, uriavsfca,* from ἀπόσὑρω, to obtrude. The  
' same as ABRASUM, which see.

\_ APOTELESMA, the Effech or Event:of a Disease.  
*Caelius Aural. Chron. Lib.* a. *Cap.* **I2.**

APOTHECA, ἀπόβηκ», from ἀπότίδημι, to lay aside, or  
reposit, formerly signify’d a Wine-cellar, but now a Shop  
where Medicines are fold ; allo a Gally-pot. Hence,  
- . APOTHECARIUS, A Preparer of Medicines.

APOTHERAPIA, αποθεραπεια, from ἀποβεραπάι'ω, to  
cure, signifies in general a perfeci and absolute Cure ; for, in  
eliin Sense, the Verb ἀποδερο.πεοσαι seems to he used, *Hippoc.  
Pracept.* In *Galen* it sometimes signifies the End or fast Part  
of a perfeol Exercise, when a Person came to use Friction,  
Unction, or Bathing, to remove Lassitude ; and sometimes it  
means a particular sort of Exercise, intermix’d with Friction,  
Remission of Motion, and frequent Intervals of Rest; and thet  
Part of Medicine which teaches these, is called *Apotherapeutica,  
dendiieyasisturi.*

APOTHERMUM, ἀπὄβερμον, an acrimonious sort of  
Pictile, such as is made of Mustard, Oil, and Vinegar, or of  
Vinegar alone, *Gal. de Acten. Diaet. Cap.* II. Some pretend  
to prove from *Galen, Lib.* I. *de Alim. Fac.* thet *Apothermum,  
Sapa, Siraon,* and *Hepsema,* are synonymous; hut their Ar-  
guments from the Text are by no means convincing. *Castell.*... APOTHESIS, ἀποδεσις, from ἀποτίθεμι, toreposit, in *Hip-  
iecrates,* is the right and orderly tepositing and placing of a  
.inib thet is broken and bound up, in the Situation in which it  
ought to continue ; and is the fame as Thesis, θεσις, and  
Often join’d with *Analepsts, drdredur,* which has the same re-  
spedi to the Arm, as ἀπὄβεσις to the Leg. \_In *Lila ear* ίητρειών.  
Ήάνάληψις, η ἀποδεσις, ή ἐντόσεσις, ώς ἐν.τἀ αυν» ῥ διαφυλἀπειν.  
«« The Supports, the Posture, and the Bandage,, must he kept

in the same State. ”

APOTHLIMMA, ἀποίλιμμα, from ἀποβλίβω, to squeeze.  
Or press out, signifies the Dregs, anil sometimes the expressed  
Juice. *Gerraus.*

APOTHRAUSIS, ἀποθροευσις, from ἀποὕραὑπ, to break off.  
The Removal of a Fragment or Splinter of a Bone, thet is  
loosened from the Surface by Exfoliation or otherwise.

APOTOCOS, ἀποτοκος, from άποτίκτω, to bring forth  
Young. Abortive. *Hefychius* expounds ἀποτοκους by ἀπογτννησεις  
γεννημάτων, “ the tender Buds of Fruits, or Fcetus of Aai-  
" mils.” *Hippocrates, Lip. de Art.* ἀποτοκους νοσημάτων χρονίους  
ποιέοντα, " giving Occasion to the Production of chronical  
" Diseases. ” ....

APOTOS, ἄχοτος, from a Neg. and πόσος. Drink. One  
that never drinks, or desires to drink. *Castellus.*

., APOTROPAEOS, ἀπότροπαῖος, from απἡρέπω, to avert.  
One os the Pagan Deities, who were called *DioAverrvncatcres,  
Primes ;* and άλεξίκακοι, thet is. Deliverers and Desenders  
from all evil and hurtful Things.

*Apotropaia,* ἀπὄτροπαια, were Sacrifices offer’d io these Dei-  
ties, and sometimes signify’d Amulets against Incbantments,  
and so were the fame as *Periapta,* περίαπτα. *Hippoc. Lib.*περί ἐνυπνἱων. Έπἱ J τὄιονν ἐναντίοιον τὄιοτν ἀποτροπίοισι, καὶ γῆ,  
καὶ ῆρωοτν ἀποτροπαιἀ γενέίζ τἀ χαλεπἀ πάντα.." In Times of  
“ Adversity *supplicate* the *Dii Averruncatores, and Terra,***u (the** Earth) and the Heroes *to avert* all evil and hurtful  
" Things. ”

APOFYCHIA, ἀπότυχία, of the Privative ἀπὸ, and τείχη.  
Fortune. Misfortune.

APOXE, APOXERA, *daeicn,* ἀποξηρον, are understood by  
*Galen, Com.* 3. *in Lib. Hippocratis naer* ίητρειῶν, to signify  
those Parts of the Body which are acuminated, and grow sten-  
der by Degrees towards the Top. Some for άποξη read ἀποξυ.  
and υπὄξηρο: for ἀπὄξηρο. and take them to be meant of those  
Parts, which heing dry and wither’d, lessen, more and more

**towards their Extremity, which by thet means is acuminated.**

*Foestus. .....*

APOZEMA, *darosnfcae,* from αποξές», to bosh. A Deco-  
ction. See DEuoCTuM, where Rules are laid down for the  
Management of this.Form of Medicines..

APOZYMOS, ἀπὄξυμος, from ζῥαη,. Ferment. Fer-  
mentcd. *Hippoc. in Prcrrh.* .a. Ἀμα 0 καὶ τάς γαστέρμς ἀποξὑ-  
μους τε καὶ ῥυπαρἀς ἀποδεικνἄκσν καὶ ῥυτιδώδεας. '« Besides, it  
" (the Looseness before dcfcrihed) makes the Belly appear as

if under a Ferment, dirty and wrinkled. ”

APPARATUS,, κατασκευή. An Apparatus. In Surgery,  
it is a Collection, and regular Disposition, of ail the Instruments  
necessary for the perfedt Exercise of the Art, or for any parti-  
cular Operation. The Word may also be ufed with respect  
to other Parts of Medicine, aS well dhetetio, aS pharmaceutic,  
which require an Apparatus of the necessary Means and Instru-  
ments for attaining their Ends. The Lithotomists heve their  
*Apparatus major and minar. Castellus, Blancand.*

APPENDICULA VERMIFORMIS. On one Side of .  
the Bottom of the Caecum lies an Appendix, resembling a  
small Intestine, nearly of the fame Length with the Cecum,  
but very slender. It is termed *Appendicula Vermiformis,* from  
Its supposed Resemblance to an Earth-worm. Its common Di-  
ameter is not above a Quarter of an. Inchi By one Extremity,,  
it opens laterally, and a llttle obliquely, into the Bottom of the  
Caecum, and the other Extremity is closed, being sometimes  
greater, and sometimes smaller, than the rest of the Ap-  
pendix.

It has some Contortions like those of a Worm when it is  
touched, from whence comes the Epithet os *Vermicularis,* or  
*Vermiformis .,* and it may likewise be compared to the Gills or  
Pendants of a Turky-cocke Its Structirre resembles nearly  
thet of the other intestines. The internal Coat of this Ap-  
pendix is solllculoirs, like that os the Duodenum and it’ is-  
likewise Reticular, the Mashes being the glandular Lacunae,-  
which continually discharge a Fluid into its Cavity. , . ...

It has been often disputed, whether this *Appendix,,* or the  
large Portion which is, as it were, the Head of the Colon,  
ought to be called the *Caecum*; but the general Division of the  
.Intestines into great and small leaves no room, to doubt of its  
heing only an *Appendix* in Man,, whatever. Reason there may he  
for talking differently with respeol to Brutesand Birds. *lVhor  
statist, Anatomy. . . . ’ ......*

The End which is shut, is not tied to the Mesentery, but-to  
the Right Kidney, by means os the Peritonaeum. Its Use is-  
yet unknown.- Some take it for a second Stomach, others for  
**a** Receptade of the Excrement of the Fcctus,. of which it is  
always full, till after the Birth. Others say, it contains a Fcr-  
ment, and others, the Fiatuosity of the intestines ; and others,,  
that it separates a Liquor by some Glands which are in its Ca-  
vity, which Liquor serves to harden the Excrements us they  
pass thro’ the Colon. *Keilsts Anatomy.*

APPENDIX, όπίφυονς, from *horuria,* to growim or upon.  
.The same as EPiPH YsIs, which see..

APPENSIO, the Suspension of- a broken Limb,, princr. -  
pally of the Arm in a Scarf. *Castellus.*

. APPETITUS, APPETENTIA,, ορεξις, ίρμὲν lumlpinpri  
Appetite. In the most general Sense it means that natural .  
Inclination which is found in all. Beings towards particular  
things; but in the striit and common Acceptation, it signifies  
a Desire of Aliment, or Meat and Drink. Of this Appetite  
there are two Kinds, which are *Hiunger* and *Thirst. „*

APPETITUS CANINUS, ορεξις κυνώδης. The same *as.*BULIMIA, wbich.see.

APPLICATIO,, εφαρμογὴ, ονροσοικοῦωσις, from, ἀρμοζτω, to-  
fit, and «ροσοικειοω, to accommodate. Application. That  
Action of theThysician or Surgeon, wherein he administers, or-communicates to the Body, internal or external Remedies, as-  
hy the Application of a Plaister, Clyster, *etc. Castellus.*

APPLUDA, the Chaff of Millet, Panic, and Sesamum. *Pliny.*APPOSITIO, the same as ADDITIO, which *see.*

APPREHENSIO, APPREHENSORIUM, the same as  
ANTILEFsis, which fee.

APPREHENSIO is sometimes taken also for a CATALEPsIs,.  
or CATocHE, which see.

*jp* APPROPRIATIO, thet Action of the natural Heat, of  
vital Flame, by which the Humours and Spirits are so united  
with the Body, and its solid Parts,, as to enable them to per-  
form their proper Functions. '

Medicines are said to he *appropriated,* when they are cal-  
culated for a particular Part of the Body.

APPROXIMATIO. A Method of Cure by transplanting  
**a** Difease into an Animal or Vegetable Subinct by way of im-  
mediate Contacti *Castellus.*

APRACTA, ἀπροπέα, from α Neg. and *nfestosa,* to acts  
Unaclive ; an Epithet of the Pudenda in a State of Impotence.  
*Castellus.*

APRONIA. Α Name for the *nigra Vitis,* or black Vine,  
Otherwise celled by the Name of *Bryony, Cljirania, and tile.*

*ttecanthe.* . Eho Root thereof, bruised with asus Fig, takes off  
Wrinkles, "if thePatient, . Immediately after being, anointed,,  
walka quarter of a Mile. *Pliny,. Lib.* 23μ *Gap. ha* See BRY-  
IONIA.' . ...sc.sc.fr. \_ .. ...

APROXIS, an- Herb, so called- by *Pythagoras,* whose Root  
takes Fine at a Distance, like Naphtha. The same Philosopher  
says, that whatever Diseases happen-, to the human Body, in .the  
time of the Flowering of. the Aproxis,. though cured,, will-he  
sure to give the Patient a Memorandum ar the Return of the  
Flowering-season. The Case is. the samewith Wheat, Hem-  
lock, .and Violets. *Pliny, Lib.* 24- *Cap..* 17.

APSINTHATUM, ἀψένθατον,.. from, ἀψίνθιον. Wormwood.  
A sort .of Drink accommodated Io the.Stomach, Of which yon  
have several Forms in *Actius, Tolrah.* I. *Serm.* 3. *Cap.* 69, 70,  
.72. '.. su. '.. '  
. APSIRRHOONT ἀψίῤῥοον, from ἄψ, backwards,^ and ῥἐω,  
to flow, in *Hippocrates* is expounded by *Galen, ati rouariaoi fecr,*flowing backwards.'\*

'. APSYCHIA, ἀψυχία, from α Negative,, and ψὑχῆ» Lise.  
The same as Ι.ΙΡΟΤΗΥΜΙΑ.

. APTISTOS,'ἄπτιστος, from α Negative, and πτἰιυω, ac-  
cording to *Erotian,,* to peel, or take off the outer coarse Rind.  
*Hippocrates,* περὶ ἀρχαίης ἰητρικῆς, among the Kinds- of Bread  
reckons *dvssear xvgulr,..n trrscaiferav, qui* Bread of Wheat  
" cleansed, or not cleansed from the Bran."

APTYSTOS, ἄπτυστος, from α Negative, and wham, to  
. spit. An Epithet of *a.* Pleurisy, or other Distemper, in which-  
nothing is spit out. *Aj heestes rbir orheueilil'tev rssdodsosat "Aemaj&r  
iferrester* " Dry Pleurisies,, in which there is no Expectoration  
by Spitting, are Very dangerous." *Hippocr.- Coac...*

. APUA, a Fish thus distinguished-:

*Encrasicholus,* Ossie. Aldrov. de Pise. 214- Charlt. Pise. 2.4.  
Rondel, de Pise. I. 2iI. Jonf de Pifc. 5I. Rail Ichth. 225.  
Ejusil. Synop. Pise. ioy. *Encrasicholus, quos alii Engraulas,  
alii Lycostomos appellant Rondelrtii,* Gefn. de Aquat. 68. .Hike  
*lecula,* Bellon, de Aquat. I69. THE ANCHOVY.

They are pickled with Sals, and kept in Barrels, and the  
whole Fish, as well as the Pickle, are in Use ;-the Fish pickled  
is apply’d like Herrings to the Soles os the Feet 4. and both  
their Pickles serve for the same Purposes. *Dale.*

i You are to chuse those that are tender, fresh, white without,  
Ied within,- small, plump, firm, and well tasted.

i Anchovies are of an opening Nature, fortify the Stomach,  
and create an Appetite.

. When they are used to Excess, they heat much, and make  
the Humours sharp-and pungent.

. They contain, much Oil, and Volatile Salt.-

. They agree in Winter with old phlegmatic and melancholy  
People, and with those who have no good Digestion: But young  
People os a hot and bilious Constitution ought to abstain from  
them, or use them very moderately.

Re MAR K.Sfe

The Anchovy is a small Sea Fish,- that is aS long ndd'ass thick,-  
very near, as one’s Finger; they fish for it in several Parts

-. near *Genoa* and *Provence.* They usually swim in Shoals, and  
make a close Body together; they will run to the Fire.,, when

. they see it, and the same is made use os as a Snare to catch  
them. But some pretend, that those taken in this manner,.-  
. are softer than the others;. they are pickled after their Heads  
are cut-off, and Guts taken out,: which soon corrupt.

This Fish is much used in several Parts os *Europo*for the  
. Excellency of its Taste, they mix it with Sauces; st helps  
... Digestion, and fortifies the Stomach with its Volatile and sa-  
line Principles,- which cause a gentie and moderate Heat in  
that Part, and disperse and attenuate the Aliments, that are  
contained therein, in the mean time, if it be used to Ex-  
cess, it Very much rarefies the Humours by these same Prin-  
ciples, and so produces the ill Effects - above-mentioned.  
*Lemery on Foods.*

APULOTICUS, ἀπουλώτικός, the same as EpULoT.ICUs,.  
winch see. '  
.. APYETOS, απύήτος, from α Negative, and πῦον, Pus.  
An Epithet for an external Disease, or Tumor which is not  
shppurable; it is the fame as ἀνεκπύητος, in *Hippocrates,* and  
differs from ἄπυος, which signifies Want of Pus. *Castellus. \*.*. APYREXLA, ἀπυρεξία, from α Negative, and πυρεξία,  
the fame as πυρετος, 2 Fever. The Absence of a Fever. - It  
signifies that Interval, or Space *of* Time, winch passes hetween  
the two Fits of an intermittent Fever; and also the total Cef-  
sation and Absence of a continual Fever.

APYROMELE, or APYRENOMeLE, ἀπυραμήλη, *n*- ἄπυρηνομήλη, from α Negative, πυρὴν,-a Nucleus, and μήλη,-  
a Prohe. *A* Prohe without a Button, that is, a *Melotris.. Ga-  
len. in Exeges.*

APYRON, ἄπυραν, from α Negative,, and πῦρ. Fine.  
What never felt the Fire ; irr particular it is apply'd by *Diosc  
corides* to *Sulphur lfivum. Lib. 5. Dap.* T24. and also by *Celsus,  
Lib.* 5. Capo I 8. Απυρας is also an Epithet bestowed on a  
chymical Preparation Galled *AEthieps,,* which is performed by

ineatis of Triththfinii-Only2. without *Ism.* Help of Firth  
**AETHIOPS... lsussu foe - .. Ἀ - s.. '**

APYROTHIUML a.Nime For SulphurVintim. *estlenc. .*

APYROTL Carbuncles ,, as *Plinys* says, *sure* so called by  
some, hecause though- those Precious Stones, so much resembse  
Fire, they yieid'not- the least Sensation-os *isu Lib.* 37. *Cap.* τί.

AQUA, Water.; ‘ *‘ .. fr - ~ ss.fr*

. See the Article ACIDULAE, and THEREa, and *Hisipocrdse  
tes, on Air, Waters, Arid Situations,,* under the Article AER.  
See. also BALNRA. ' ’ 4. so ' -: ' ;..

It is difficult to form a Judgment of Waters in general,, bti-  
cause os the peculiar. Nat use and. Qualities of Places,. Air.,, and  
many other things;, but, for the most part, the hast-Water in  
whet is pure, sweet,, participating of no manner of Quality,--  
and soonest passes off the,Hypochondria,, creating no Molesta-  
tion in its Passage, nor breeding. Inflations, and what is leash  
subject to Corruption. *Diofcorides, Lib.. q. Cap.* IS,

*Of*Sea-wash.

Sea-water is hot and acrimonious, hurts the Sminaebyssssinirher  
the Belly, and expels Phlegm- Used warm in a Fomentation.; -  
it is both a Drawer anda Diaphoretic, and is therefore proper in'  
Affections of the Nerves, and sor Rihes, hesore they- areulcerf  
rated. It is an usefidTngredient in Cataplasms os Barley Meal,  
and in discussive PlalsterS and Malagmata. Administered in 2.  
dyster warns, is evacuates the Belly; and, injected hot the same - .  
way, eases the Gripes. It makes a good Fomentation for the-  
Psors,. Itchy Tetters ζλΐεχήνων}, and Scurf [κονιδων];. and foss  
Breasts turgid with Milk; it also discusses LividnesiS from Blows, '  
if the Pisce affected be fomented with the same hot.- An hofc-  
Bath of Sea-water is effectual against the Bites os venomous-  
Creatures, which are succeeded by Tremblings and Refrigera-  
frons, especially those os the Scorpion, Phalangium,-and Aim;  
- The same relieves under an inveterate Cachexy, or Disorder of  
the Nerves;, and the hot Vapour thereof comforts' and helps:  
those' who labour under a Dropsy, Pain in the Head,-and  
Deafness. Sea-water kept pure,, without being mixed with4potable Water, loses its rank Smell. Some boilTt first,: and1then set it aside. Lt is also administered- as a Purge, either  
alone, or with Okycras,. Wine, or Honey, care bring taken,;,  
after its Working, to - give the Patient some Broth made OP  
Chicken or Fish, inorder to temper its acrimonious and bitin»'.  
Quality. *Diafcorides, Lib..^. Cap.* T9. ,

'' With respect to Waters, two things come under our pre-'  
sent Consideration,, which are, that pure simple Element, sus'  
well known, and Of so universal- Else in common Lise; and'  
medicinal or medicated Waters, distilled from, -or- impregnated'  
with. Animal,. Vegetable, or Mineral Substances,; which are di-o  
rected to be kept in the Shops.

Many and surprising are the Properties *os* Water; \* which'  
have been discovered by Naturalists, to whose Province these"  
properly belong. I shall therefore confine myself to the Proper-  
tins.of Waters, so sar as they relate to Medicine. Perhaps i6.  
may he of some Use to specify the Salubrity and Insalubrity of'  
those Waters we generally meet with, because.as good Waters-  
conduce to Health, those winch are bad, are productive os Dif-  
eases. ’ ....

It is a common Observation, familiar in the Ritchen andf  
Laundry,, that some Waters ares hard, crude, and rough, and5others again soft, mild, smooth, or, as it were, milky: The\*  
former whereof are properly accounted had, and the latter7good..

WATER *of dissolved* IOE *and* SNow.

Among the crude and hard Waters,' we reckon that which\*  
is obtained by the diffolvino of Ice: And of this Water *Hipo'  
pocrates* says Very justly,.." That the clear, light- and sweet Part'  
"in frozen Water, is dissipated and discharged ; and only the?" turbid-- and ponderous Part left behind: For, is a certaim  
" measured Quantity he set to freeze in the open Air, and the~  
‘‘ Ice be the next Day dissolved in a warm Place, and the

Water be now measured again, it will be found to have lost

\*much of its Quantity.-'' The same Author likewise assigns ’  
a Very good Reason why Snow-water is rather pernicious than'  
advantageous to Vegetables and Animals; as Water by freezing'  
has its Texture destroyed.. For 'tis manifest, that the subtile  
Principle *of* the Water is thereby separated from the gross Part;\*  
and driven towards the Centre: -Whence, in the Middle of all-  
ice, there appear large Bubbles, proceeding from the subtile'  
elastic Matter heing driven inwards; where, by its rarefactive  
Motion, it'increases the Bulk of the Ice, and causes it to \*  
possess a greater Space, than when in the Form os Water ;  
and thus occasions the bursting of such Glass or Earthen Vesseis  
as it happens to be contained in. And this shews by whet  
means the fine, - fluid elastic Principle is separated, and only the  
grosser and more ponderous Part lest behind :. Insomuch that  
Water heing despoiled and corrupted by this Operation, must  
needs hecome unwholsome. But principally the Use of Snow-  
water is sound to produce Swellings in the Glands os the Throat.,  
as frequently happens to those.who inhabin the Bottoms of Moun-

tains, which are all the Year covered with Snow; hut espe-  
cially in the Woman, who heve generally large Tumors hang-  
ing at their Throat. And this the People who live at the Foot  
of the *Alps, Pyreneans,* &c. to their great Misfortune, expe-  
rience. Those Waters therefore must he carefully avoided,  
which, upon a general Thaw, stow down the Sides, of the  
Mountains into the Valleys; and thus often pollute and cor-  
rupt the Spring? and Rivers.

*The* **WATERS AMINES.**

In the next place, those Waters are found to be hard. Crude,  
and unwholsome, which are found in metallic Mines, or de-  
scend from very high Rocks; because they lick up in them  
Passage many rough, earthy, and astringent Particles from the  
Fossiis, Minerals, Chalk-stones, and. the harder compacted  
Bodies they run over; and thus become impregnated therewith;  
whence few can bear to drink them. And their Use, to such  
as are not accustomed thereto, proves very pernicious. Thus  
'th observed by *Hippocrates,* that those Waters are to be reject-  
ed aS unwholsome which flow from Rocks; for this renders  
them hard; and those again which run near to hot Springs,  
Beds of Iron, Stone, Sulphur, Alum, *etc.* for none but crude,  
heating, and unwholsome Waters, that pass not well by Urine,  
but bind up the Belly, are to be found in such Pisces. And we  
cannot but commend the Justness os the Observation, with  
regard to the common Waters found near hot Spring; for such  
generally are crude and unwholsome, unfit for brewing, or pro-  
moting the Secretions of the Body, but rather obstruct and  
hinder them; and the Reason hereof seems principally owing  
to the chalky, rough, styptic Earth, with which the Soil about  
these Springs most commonly abounds.

**CHALKY** *and* **STONY WATERS.**

Again, those Waters are crude, heavy, and sluggish, which  
spring up in chalky Ground, as may appear from the Pipes or  
Canals through which they run ; for they all along deposit an  
earthy, chalky Matter, that lines the Insides of these Conduits;  
and, when boil'd over the Fine, deposit a stony Crust on the  
Sides of the Vestel. In short, the stony Waters of all Kinds,  
running upon chalky Beds, are unwholsome, crude, and hard;  
as the Matter of these Beds is easily imbibed by the Waters,  
which renders them gross and heavy; *so* that when drank, they  
pass with Difficulty through the fine Canals of the Body; nor  
readily reach the Extremities of the Veins, without causing  
Obstructions.

**STAGNANT WATERS,**

Lastly, those Waters are unwholsome which collect them-  
selves in stagnant Ponds, marshy Grounds, or are received into  
Reservoirs, formed on Purpose to preserve the Rain, that runs  
from the Tops of Houses ; as also those of Springs arising in  
an open Champain Country, and having a muddy, unctuous,  
earthy, or bituminous Bottom ; for all these are gross, turbid,  
and somewhat foetid ; and, though frequentiy refreshed by new  
Rain, lose their fine, thin, and most useful Principle, by the  
Sun's striking continually upon them; whence they hecome  
subject to cause Obstructions in the finer Vessels, and are pro-  
ductive of chronical Distempers.

**RAIN-WATER.**

On the other hand, those Waters must he allowed good and  
wholsome, which are light, sweet, soft, thin, and readily pass  
through all the excretory Vefleis of the Body. And of this  
Kind, in the first place, are certainly those rinsed by the Sun  
into the Atmosphere. The Cause *of this is, with more Chy-*Inical Knowledge than one could expect, delivered by *Hippo.,  
crates,* in these Words: " Because the Sun raises that Part  
" which is thinnest and lightest, leaving behind what is saline,  
" gross and heavy, in the Sea. \*' For, in Reality, Rain-water  
is Water distilled by the Sun, which not only raises from the  
Ocean, but likewise from all Springs and Rivers, the lightest  
and thinnest Parts of the Waters, makes them mount into the  
Atmosphere, attenuates, perfects and digests them with its  
Rays ; and indeed enriches them with the universal, aethereal,  
and sulphureous Salt, or rarefied and exalted Nitre, as appears  
from Experiment and Observation: So that by this means, the  
Chymic Sun seems to prepare a most perfectly pure and whol-  
fome Water, which will readily pass through all the finest Ves-  
feis Of the Body, wash the capillary Meanders thereof, and  
promote its own Discharge by the Law os Circulation. Whence  
this naturally distilled Water is better fitted than any other for  
the Nutrition of Vegetables, the brewing of Drinks, the in-  
fusing of Herbs, all Family Uses, and is of itself, without far-  
ther Preparation, one os the noblest, and, when properly used,  
perhaps the most universal Remedy in all Nature, aS we propose  
more fully to shew hereafter.

We are sensible os the Objections against this general Posi-  
tion, as to the Purity and Perfection of Rain-water. " 'Tis  
" said, that thisWater soon putrefies, corrupts, and stinks, and  
" thence must necessarily hecome unwholsome." Bur, to con-

sider the Matter chymically and clofely, though the Fact here  
alledged were certain, yet it only demonstrates, that this Water  
abounds with sulphureous Particles, which is also confirmed  
by numerous Chymical and Philosophical Experiments.

But this inconvenience attending Rain-water may, in great  
measure, he prevented, by catching it, not aster it has washed  
the Tops of Houses, and nin through foul Pipes and Conduits,  
but as it salis immediately from the Air, in an open Place where  
no Houses stand. For this, when it has stood a while to set-  
tie. Cleanse and purge itself, as it will in a Very sew Days, may  
he drawn fine from its Bottom, and long preserved perfect, in  
pure Vessels of Earth or Glass: But input into Vessels of  
.Wood, especially such as are new, it thence extracts numerous,  
fermentable, sulphureous Parte; and accordingly runs into what  
is commonly called Corruption.- And the Reason of this Dif-  
ference is plain from Chymical Experiments ; for as, by stand-  
ing, the grofs Sediment salis to the Bottom, that, like the  
Lees of Wine or Beer, contains the subtile, fermentable, sul-  
phureous Particles, which heve the Power to begin or renew  
an Intestine, fermentative, or corruptive Motion: When these  
busy Particles are once separated, whether by Standing, Filtra»  
tion, or Distillation, the pure remaining Fluid must necessarily  
continue unaltered in its natural Texture and Constitution.

'Tis also worth observing, that the Rains which fall about  
the Vernal Equinox, and in the Month of *May,* when the East  
and South Winds blow, are of a much more subtile and fpiri-  
tuous Nature, and refresh and nourish all the Vegetable King-  
dom, better and quicker than those which fall in other Months,  
when the Winds stand to different Points of the Compass: The  
Reason whereof seems owing to this, that in the coldest Coun-  
tries, or such as are filled with dense Vapours, the Exhalations  
of the Earth and Waters cannot he so much ripened and re-  
fined, as in Countries where a warmer Sun raises them up,  
concocts, and brings them to Maturity.

**SPRING-WATERS.**

The next Degree of Perfection we assign to those Waters,  
where the Springs lie high, rise on clean earthy Hilis, and run  
upon a gravelly Bottom, or pure hard Clay; provided they he  
sweet, that is, perfectly tasteless, limpid, transparent, cold in  
the Summer, warm in the Winter, and receive the fifing Sum  
For when Waters pass through such a kind of porous, spongy  
Earth, which is not dissolved thereby, they are thus percolated,  
filtred, and purified, after the manner of that common Practice  
*in Italy, Sicily, Holland,* and other Countries, where they  
pass their thick and muddy Waters through a certain spongy  
Stone, cut and chizzeled into a kind of Mortar, so as to be-  
come a large and proper Filtre for throughly purifying the  
Water, which it transmits perfectly bright, clear, and grate-  
ful, retaining the Filth and Slime hehind.

*To try the Goodnefs* **oyWATERSs**

There are certain (economical Observations, and Ways of  
proving the Goodness, Excellence, Thinness, and Virtues of  
Waters. It is a thing known to every one, that those Waters  
are soft and light, which readily take Soap, easily wash Linen,  
and quickly boil Peas, Pulse, *etc. soft* and tender; and the  
Waters which will not do this, are properly accounted rough,  
harsh, and hard. But *for* these Purposes, there is nothing com-  
parable to Rain-water, which is admirably fitted for the washing  
of Linen, and boiling of Pulse and Herbs to the greatest  
Perfection. So likewise these Waters are to be esteemed good  
and excellent, which best serve the Purposes of Brewing, or  
the making of Malt Drinks; for, 'tis certain, that the Whol-  
sameness of Malt Liquors has a great Dependence upon the  
Goodness of the Waters; whence such Countries always brew  
the best, wholsomest, and soundest Drinks, as are supplied  
with the best and purest Waters. In general, hard Waters  
make the best Beer for keeping, and soft Water the best sor  
Flavour; but they are subject to turn sour. And a Proof of  
Excellence in this Case is, when the Drink neither oppresses  
the Stomach, nor binds up the Belly, but passes readily by Urine.  
On the other hand, in those Countries where the Waters are  
thick, gross, and flimy, the Drinks are unwholsome, generate  
Wind in the Stomach and Boweis, pass sluggishly through the  
Canals of the Body, breed Stones, and stony Concretions, in the  
Viscera, rot the Teeth, relax the Gums, *etc.* of all which  
there are but too many Instances in particular Countries. An-  
other Sign of Goodness in Waters may be taken from their  
feeding and producing fine wholsome Fish; and their Indis-  
position to freeze. For these Particulars prove a Fineness of  
Parts, and a temperate and wholsome Nature, in such Waters.

**RIVER-wATER.**

Those Waters *likewise,* that remain long found and uncor-  
rupted, may be esteemed good ; as this affords some Token of  
their heing free from impurities, and Parts winch do not pro.:  
perly belong to them, and of their heing rather simple, pure,  
and full of the spirituous Principle, which preserves them from  
Corruption. And hence 'tis found, that if River-water, as

well aS Rain-water, be first freed from its Filth by standing,  
drawing off from its Bottom, or filtring through a porous Stone,  
and then put into proper large earthen Vessels, and preserved  
in a cool Vault or Cellar, it keeps much better and longer  
than when committed to little Vessels, and set in a warm Place.  
And thus the Water of the River *Tibor,* which the common  
People drink thick and muddy as it runs, is clarified and pre-  
served by the Nobility of *Rome,* in large Earthen Vases, which  
stand in their Wine-cellars. ' Whence It remains perfect and  
inncorrupted for many Months, or even for Years.

Besides the several Signs of the Excellence of Waters, above  
delivered, there are abundance more, derivable from the Art  
Of Chymistry ; though these being not so well suited for gene-  
**ral** Use, we shall not enter into a Detail os them, but finish  
this Account with observing, that soft, subtile Waters, and  
particularly those of Rain, are constantly sound the fittest for  
washing what we call the Calxes of Metals, from their Salts;  
whilst hard Water is very unsuitable for this Purpose.

*. Hoffman,* in the following Dissertation, has farther explained  
the Natures of different Waters..

**WATER** *considered as a* **MEDICINE.**

How earnestly, and how universally, a Medicine capable of  
subduing all Disorders, of whatever Nature, has been desir’d, is,  
1 presume, sufficiently known to. such as have any tolerable  
.Acquaintance with physical Subjects; and indeed, immorttal  
Honours ought to crown the Man who should be so lucky as  
to discover a Medicino of this Kind, since the Recovery os the  
Sick, and the Safety of Mankind in general, are so nearly con-  
nested with a Discovery os this Nature. But since we have not  
hitherto found a Medicine capable os certainly subduing any  
One Species of Disorder, so we have the greater Reason to despair  
of finding one. capable of eradicating and baffling the whole  
Train of Diseases to which Mankind are subject; lor if we re-  
flect, with Attention, on the Difference or Constitutions, on  
the numerous and osten contrary Causes os Diseases, and on  
the Virtues of Medicines varying according to the various Con-,  
stitutions of the Patients to whom they are exhibited, we shall  
easily see, that 'tis in vain to rack our Brains, and spend our  
Time, in the Pursuit of an universal Medicine.

'. But if there is, in Nature, a Medicine which deserves the  
Name os *Universal,* 'tis, in my Opinion, *common Water :* The  
Use of this is so common, and so necessary to us all, that with-  
out it we can neither live, nor preserve our Bodies sound and  
healthy ; for it guards against Diseases *os* every Kind, protects,  
and defends the Body from all kind of Corruption, that may  
prove fatal to Life. Besides, *Watcr* answers all possible Inten-  
tions of Cure ; so that, without it, no Disorder, whether chro-  
nical or acute, can be happily and successfully removed. For  
Confirmation of this Opinion, I shall not insist on the Medi-  
**cinal** Springs, whether hot or cold ; nor attempt to prove their  
salutary Virtues in subduing Various Disorders ; but shall con-  
fine myself entirely to common Water, the' of the best and  
purest Kind, the universal Use of which I at present design to  
recommend.

. Since, then, I am to consider *Water* as an universal Medicine  
in preventing and curing Diseases, and since I intend to prove,  
that it is so, by the strongest and best chosen Topics I possibly  
-can, I think it will not be improper to premise a sew Things  
concerning the natural Necessity our Bodies lie under of being  
ruin'd or destroy’d one time or other; that, these things being  
-known, we may be able, with the greater Accuracy, to discern  
what Diseases are curable, and what not. As to the na-  
tural Necessity of dying, 'tis sufficiently known, that the  
Duration os our Bodies, and a Prevention os that Putre-  
action to which they are naturally Very much dispos'd, depend  
entirely upon the perpetual and uninterrupted Circulation of  
the Blood and Humours ; for so long as this Circulation is  
entire and unobstructed, so long we are said to be alive; but  
in proportion as it decreases, or is impair'd,. we make gradual  
Advances towards *Death.* 'Tis, therefore, this Motion alone  
which guards the Body against Corruption, because it hinders  
that State os Rest, winch is the Cause and Foundation of all Pu-  
trefaction, from taking place in that heterogeneous Fluid with  
which the Parts of all Animais in general abound.

Our Bedies would, without Doubs, enjoy an eternal Dura-  
tion, if we could for ever preserve and maintain the Circulation  
of the Blood ; but fince human Weakness, and the wretched  
Condition of our mortal Nature, render this impossible, it is  
at least worth while to inquire into the Cause which may pro-  
duce a Deficiency or Decrease of this Circulation, winch, in  
thy Opinion, is as follows : This vital Circulation of Humours  
is carried on by Organs and Ducts; the elastic Fibres of the  
Muscles, which are furnish'd with a successive and reciprocal  
Dilatation and Contraction, constitute the Organs. These  
Organs are Vessels, some of larger and others of lesser Diame\*  
ters. When, then, at any time the Elasticity and Impulse of  
the Fibres are *so* diminish'd as not to bear a due Proportion to  
the Quantity of Humours to be moved, and when these Hu-  
mours are not quickly and expeditiouilv carried thro' the small-

**est** Tubuli, Stagnations of the Humours must unavoidably hap-  
pen in the Capillary Vessels; and hence arise Putrefactions,  
those fruitful. Sources of Disorders and Death. .

For as, in all Machines, the Elasticity and moving Forces os  
the component Parts are weaken'd and impair’d, by reason of  
the Change undergone by the Matter os which the said Machines  
are made, .so it happens in our Bodies, that the Fibres, which  
alone are the instruments os Motion, in Process osTirne become  
thick, hard, solid, agd dry : For this Reason they not. only  
move with Difficulty, but the Pores, and minute Passages, being  
by that means render'd narrower, hinder the Fluids from being  
carried thro' their Chanels in an equal and uniform Course. Tins  
is sufficiently proved by the Fleshes of old Animals, which, by  
reason of their Hardness and Solidity, require a stronger Heat,  
and longer Time, Io render them soft and tender, than the  
Fleshes of young Animais doS Hence we may conclude, that  
there is not the least Doubt to he made but if the fame State,  
the same Mobility of the Fibres and Vessels, and the same **De-**gree of Aperture in the Pores and minute Passages, could always  
be maintain'd and preserv'd. Life might os course be protracted  
for ever. If external Causes, and foreign Degrees os Violence,  
did not interfere to put an End to it. That this surprising  
Effect may possibly be produced, either by Medicines, or a pro-  
per Regimen, is a Tact winch can by no means gain the Assent  
os those who are ignorant os the Virtues and Qualities of natural  
Bodies: But 'tis not only probable, but strictly true, that many  
have fallen short of that Period os Lise andDuration, which the  
natural Temperament and Constitution of their Bodies seem'd  
to promise, whilst they were either ignorant os,, or despised  
those Rules, the Observation of which would, in the very Na-  
ture of the Thing, have procur'd them that Blessing; so that  
the greater Part of the human Species, either by exorbitant Pas.  
sions. Intemperance with regard to theNon-naturals, or a cri-  
minal Neglect to distinguish between things of a salutary and **a**noxious Nature, unavoidably shorten then Days, and render  
their Very Existence a Foundation for Distress, Calamity, and  
Misery. ..

. Having thus explain’d the natural and internal Cause and  
Origin of Death, it will not be improper to assign a sew Rea-  
sons why some Diseases are incurable, and of so stubborn **and**unrelenting a Nature, that they will not yield to the highest  
Skill, or the best chosen Remedies. Now that there is a cer-  
tain Analogy and Proportion betwixt the Agent and the Patient,  
and that Effects can only be produced by their proper and ade-  
quate Couses, are Truths fussicientiy evinced and explain'd, both  
by Reason, and the Laws of Motion: When, therefore, obstinate  
Obstructions of the Vessels, Indurations of the Viscera, large  
Effusions of Humours into the Cavities of the Ducts, and con-  
sequent Putrefactions, happen, whet Physician is able to discover  
Medicines of such a powerful and efficacious Quality as to sub-  
due and remove these Disorders ? Who can put a seasonable  
Stop to the remote and internal Inflammations of the more noble  
Parts, and the Mortifications consequent upon them ? Or, what  
Man is there found among all the Venerable Sons of the *Healing  
Art,* who can, with Certainty, quell and calm the violent  
and preternatural Commotions of the nervous System ? If **I**could once find the happy Man, who, by any sort of Medi-  
cines, could perform such miraculous Cures, I would not only  
pronounce him a second *AEseulapius,* hut loudly proclaim, that  
he was sent from *Heaven* as a common Blessing to the *Earth ;*since I am firmly persuaded, that no acute Distemper could pos-.  
sibly prove fatal to the Patient, who should have the good Luck  
to be under his Care.

We must also, on this Occasion, inquire whether there are,  
in Nature, Medicines peculiarly adapted and calculated for  
removing particular Disorders. 'Tis universally known, that  
some Medicines are, even in our own Days, wonderfully extoll'd  
*as Specifics* against certain Diseases. Thus the *Peruvian Bark is*esteem’d a Medicine os divine and irresistible Efficacy against  
Fevers, *Flsuicesilver* is wonderfully ex toll'd against a virulent  
*Lues Venerea. Opium* is said to be the surest and most efficacious  
Asswager of all Kinds of Pain. *Steel* is call'd the sovereign  
Reliever os the Hypochondriac. *Sulphur* is accounted the most  
Valuable Pectoral. *Castor* is judged to have the most happy  
Influence on the Nerves. Bitters are applauded as the most  
suitable Remedies in dropsical and cachectic Cases. Nitre is  
given out to be of uncommon Efficacy in allaying feverish Heats.  
But tho' these Medicines are justly distinguish’d on account of  
their Virtues, and. their PraiieS deservedly celebrated, yet any  
Person, who has been for a considerable time employ’d in the  
Practice of Physic, cannot sail to observe, that they are by\* no  
means sufficient to remove the respective Disorders to which they  
are appropriated: For who does not know, that almost' all  
Distempers are nourish'd and fomented by different, and often  
by contrary Causes ? Who is ignorant, that the same Diseases,  
in different Stages, appear with different Series of Symptoms ;  
and that, according to these, there is more or less Danger in the  
Case ? Who is not appris'd, that there are different Constitu-  
tions; and that oh these the Actions of Medicines Vary Very  
remarkably? Hence it must necessarily follow, that one and

*e*

***the*** *same* Medicine must produce different, and even con-  
trary Effects, according to the different Constitutions Of **the**Patients to whom it is exhibited ; for 'tis carefully to he adverted  
to, that Medicines act not only *secundum Activitatem suam, or  
according to* their own inherent Qualities, but also *secundum  
Rueptivitatem,* or according to the Constitution of the Patient  
to whom they are exhibited ; or, in other Words, the Force of  
Remedies is the Result of a mechanical, mutual, and reciprocal  
Action and Reaction of Medicines and Constitutions; so that  
if a Medicine acts upon the Body, the Body returns the Favour,  
and acts in like manner upon it. Hence we may judge, how  
daring and impious the Practice of those is, who, not regarding  
the Diversity of Constitutions, morbific Causes, and other Cir-  
cumstances, in the same Disorder invariably prescribe the same  
Remedy-exhibited in the same Form, as blundering and unskil-  
ful Physicians do, to the great Reproach of Physic, and the  
unfpeakable Emolument of Funeral-undertakers, Grave-diggers,  
and all that Class of Men who *live* by burying the *Dead:* For  
the Physician who duly adverts to the above- mention'd Consi-  
derations, will not readily adhere to one and the same Remedy  
in one and the same Disorder, unless all Cases were directly  
parallel.

It now remains, that I fix and ascertain the precise and deter-  
minate Sense, in which *Water* may be said to be *an universal  
Medicine.* Now I affirm, that Water is excellently suited and  
adapted to all Constitutions, and that at all Times and Seasons  
whatever; that there is not, in Nature, a more noble or effica-  
cions Preservative against Diseases; that in acute as well as in  
chronical Disorders, it affords a most certain Relief; and lastly,  
that its Use answers all possible Intentions, as well *preservative  
as curative:* But fmce there is a great Difference between dif-  
ferent Waters, we are carefully to inquire which are hest calcu-  
lated for answering this Medicinal Intention ; for 'tis not to be  
deny’d, that the Nature and Properties of particular Waters  
differ so far as to he easily distinguish'd, eVen by the Taste of  
such as accustom themselves to drink Water. But the best  
Way of distinguishing them is by Chymical Trials, theirWeight,-  
and mixing them with different Substances. It must not be ima-  
gined, that Water is an homogeneous Fluid ; there are nume-  
rous Experiments that manifest it to he a Mixture of different  
Parts. Thus all Waters contain an aereal or aethereal Principle,  
whereon their elastic Property seems entirely to depend ; for all  
Waters are more or less expansive and contractive, as they con-  
tain more or less Ain or .either. This evidently appears in the  
Winter-thermometer, where the included Xiquor possesses a  
geater Or lefs Space, according to the greater or less Degree of  
eat it sustains: For 'tis the Nature of all Liquors to admit a  
great Quantity of aethereal Fluid when they are heated, and  
again reject it when they are cool'd ; as we know by particular  
Experiments, made in a Very severe Winter. The Quantity of  
Air or ./Ether residing in Water cannot perhaps be better deter-  
min'd than by means of the Air-pump; for the more subtile  
Waters, included in an exhausted Receiver, throw up numerous  
Bubbles, and, if somewhat heated, flow over the containing  
Glass; as, on the contrary, those winch are grosser, and more  
ponderous, afford fewer Bubbles *in Vacuo.*

Waters also appear to consist of a lighter and a heavier Part;  
and the former, as being more moveable, easily rises first in  
Distillation; whilst the heavier and grosser Partiales require a  
greater Degree of Heat to bring them over: Whence 'tis ob-  
servable, that Waters lose then more subtile Parts in boiling,  
and leave the Cruder and less useful ones behind, as is known to  
all those who are curious in the making of Coffee; for if the  
ground Berries are put into Water, that has long been boiled,  
the Liquor, fo made, becomes less quick and pleasant to the  
Taste. It has also been observed, that some Waters rise much  
faster then others in Distillation. Waters also differ extremely  
in then Gravity, as appears by the Water-poise, those which  
abound with Earth and Salts causing the Instrument to rise higher  
than such as are pure: But Distillation is one os the best Ways  
**os** discovering the Purity of Waters; as not only rendering **the**Quantity, but also the Quality, of the Contents evident to **the**Senses. 'Tis surprising to see what a large Mass of earthy or  
stony Matter remains, upon the Distillation os some Waters. I  
once distill'd two Quarts of Spring-water, in a Glass Body, to  
Dryness, repeating the Operation ten times in the same Vessel;  
and by this means obtain'd a hard stony Crust at the Bottom, as  
thick as the Back of a Knife. Most Waters contain a challty  
Earth, some an Oker, others a stony Matter, and others again  
a Proportion of common Salt. But the true Way of examining  
whether Waters are impure, or contain any foreign Matters, is  
by the Means of Chymical Experiments ; two whereof I have  
singled out for my own Use, and recommend, as exactly disco-  
vering the Purisp or Impurity of Waters. The first is, by  
dropping Oil of Tartar into them; and the second, a Solution  
**of** Silver in *Aqua-s.‘ortis.* If the Waters are purs, fuch as Rain-  
water, VVater distill’d, and some Sorts of Spring-water, they  
manifest no Alteration upon mixing with thesh Liquors ; but if  
impure and gross, they turn milky with Oil of Tartar, espe-  
cially if they abound With a chalky earth . and the Solution of

Silver turns impure Waters thick, grey-colouPd, and. If they  
participate of Iron, almost red.

The Effects of Waters also manifest their Nature, Subtilty,  
and Purity: Thus, thofe that are light and soft serve best for  
mollisying the Bones of Animals, and the Boiling os Sea-fish.  
The Whitsters and Bleachers find a remarkable Difference in  
Waters; the softer and setter Sorts thereof serving hetter to  
wash and blanch, than such as are ponderous, hard, and take  
Soap with Difficulty. The Bakers find, that the more soft and  
subtile Waters make their Bread rise well. The Gardeners oh-  
serve, that such Waters as are light, subtile, and spirituous, are  
much hetter to water their Beds with, than such aS are herd.  
The Masons, Makers of Terrace and Figures in Plaster of *Paris,*sind hard Water the best for their Purpose; and can scarce work  
with such as is soft, so aS to give their Matter its due Strength  
and Firmness. The Chyinists sind a great Difference in Wa-  
ters ; those of Rain being best suited to wash and edulcorate  
their Magisterios and Metalline Powders, *viz.* the Calx of Gold,  
Silver, the Caput Mortuum os Vitriol, *etc.* as readily drinking-  
in the Salts that hard Spring-waters will scarcely touch. **We**daily observe, in the domestic Operations of Brewing, Wash-  
ing, . the making os Tea, *etc.* that the more subtile **and**soft RiVer-waterS are better for these Purposes than Spring-  
water.

But for Medicinal Purposes we prefer Rain-water, as what is  
naturally distill'd by the Sun, and thus render'd fuhtile, and fit-  
ter for Solutions, Infusions, Extractions, and all internal Uses»  
Only this Water, being mix'd with Various mineral. Vegetable,  
and animal exhalations, is thence render'd easily corruptible, if  
exposed to the free Air, or suffer'd to stand long in Vessels of  
Wood. The Rain that falls in the Month of *March* is more  
durable, as not then receiving so many Effluvia. The better  
to fit this Water for Medicinal Use, 'tis proper to keep it in'  
earthen Vessels, close stopp'd down: And thus if it be col-  
lected, not in Cities and Towns as it runs from the Spouts of  
Houses, but in the open Fields, it may he kept sound and ser-  
viceable for several Years.

Next to Rain-water, in point of Goodness, comes that of  
Rivers: But as Rivers proceed from the Springs situated in high  
and mountainous Pisces, and as Rains increase these Springs,  
which, running over Vast Tracts of Land, drink up many dif-  
ferent Matters from the Earth; hence Rivers become more  
turbid and impure, the larger Tracts of Land they wash in  
their Course. Add to this, that they take up numerous hete-  
rogeneous Parts from the Bottom they run upon, whence **there**often arises a considerable Difference hetwixt Rain and River-  
water. Lastly, Rivers, being perpetually exposed to the free  
Air, and the Action os the Sun, have their more subtile Parts  
exhaled and raised into the Atmosphere, so as to supply **the**Matter of Clouds and Rain.

There is likewise a great Difference between the Waters of  
Rivers; for those that have, a swift Course, or run Violently  
down from the Mountains, where they rise, into the lower  
Plains, are Very different from .those where the Course is  
flack and gentle, and which rise in lower Places. Thus  
the rapid Rivers usually afford a light and subtile Water, not  
greatly subject to Corruption ; tho' somewhat improper for the  
seeding and nourishing of Fish, because the Rapidity of their  
Motion prevents the Spawn of the Fish from clinging to their  
Banks, so as to be there animated by the Heat of the Sun. Bur  
tho\* these Rivers of swift Course do not greatly abound with  
Fish, yet those they produce are well-tasted and excellent: Thus  
the *Rhine* and the *Rhone,* which rise from the highest Moun-  
tains of the *Griseus* Country, are found to he much lighter  
than the Waters of other Rivers. And 'tis remarkable, that  
the Ships corning out os the River *Meyne* into the *Rhine,* draw  
much more Water in the latter: And hence the Waters of **the***Rhine* and the *Rhone* appear, upon Hydrostatical Examination,  
nearly to approach the Lightness of Rain-water. And as both  
these Rivers are Very rapid, their Waters are hence render’d less  
corruptible, and therefore allow'd, for internal Medicinal Use,  
to excel the Waters of all other Rivers. Thus we are assured,  
from a good Writer upon the Water of the *Rhone,* that " if  
" it be kept in Wine-cellars, put up into large earthen Jars,  
"so as there to deposit its Sediment, for some Weeks or  
" Months before 'tis drank, it thus hecomes pure and excel-  
" lent; and will afterwards keep many Years, or even an  
" Age, without spoiling or corrupting." *Jacob. Sport, in  
Observation, circa Aquam Rhodan. in Act. Erudit. Ann.* I683.  
*pi 5\*9' . .\_*

The Rivers that stow gentiy, differ from the former, not  
only on account of the immense Quantities of Fish they breed,  
but also because they generally run on sat and claynh Bottoms,  
or such as afford proper Bedding and Nutriment to Fish; whence  
seoh Rivers are not so clear and crystalline as those of a rapid  
Course:. But then such Waters are of a softer Nature, and  
serve for the Purposes of Washing, Fulling, Scouring, *eta.*without any considerable Addition of Soap. From henee it  
may easily appear, that Rivers are not at all alike, or equally  
fit for Medicinal Use: Thole to he chosen for This Purpose are

Hear, light, do not easily corrupt, and receive no Alteration  
Upon the Addition of Oil os Tartar, or any metalline Solution.  
It must be constantly observed, that Rivers os a rapid Course  
are uniVersally more wholsome than those which stow flow and  
gentle.

Spring-waters are also sometimes observed to differ in their Vir-  
tues ; for according to the different Nature of the Soil and earthy  
Matters they meet with or imbibe, they receive a different Nature  
and Disposition ; whence we seldom find Springs os a perfectly  
pure and light Water. The greatest Part os them leave acopi-  
ous earthy Substance upon Distillation. There are but few that  
do not turn thick with metalline Solutions, or alcaline Salts:  
Some of them contain common' Salt.; and others a subtile,  
volatile Vitriol. If they hold common Salt, Oil of Tartar will  
discover it, by turning milky therewith: Is they contain a  
vitriolic Principle, the infusion os Galis, or Balaustines, will  
manifest it by turning black. There are others , again, that  
contain somewhat of Iton, and thence have a styptic Taste,  
and let fell an Oker upon standing. 'Tis therefore the Business  
of Art and industry, out of so large a Number of Springs  
wherewith Nature supplies us, to discover the wholsomest,  
which are. known by their Lightness, Transparency, Purity,  
Durability, and the Trials aheve-mention’d. This Difference  
in Spring-waters must also be observed, that some are soft, and  
others hard, the latter whereof are the most durable, and indis-  
posed to freeze; whereas the former more easily turn to Ice.  
They are both of them wholsome and medicinal, if properly  
suited to the Disease and Constitution of the Drinker or Pa-  
tient. ' . . ’; \*

. Having thus shewn which Waters are best fitted for Medici-  
nalUse, and how they are to be distinguish'd and examin'd, we  
now come directly to prove the Excellence and universal Virtue  
of pure Water : Our first Position is. That pure and light Wa-  
ters are .agreeable to the different Natures and Constitutions of  
all Men; for since the Circulation of the Fluids thro' the  
Canals, and finest Veffeis, is whet preserves and secures the Body  
from Corruption, and keeps the Blood and Juices in a thin,  
moveable State, Water must necessarily be appropriated to the  
Continuance os Life. The Fluids of the Body, serving to Nutri-  
tion and the vital Offices, and whereof the Solids also are com-  
posed, actually consist both of Solids and Liquids : That there  
are solid Parts contain'd in the Blood, is evident upon drying it;  
and that these Parts are of different Natures, some saline, others  
unctuous, some mucilaginous, and others earthy, appears to  
the Senses, by the inflammable Property they have upon Eva-  
poration, and other Chymical Experiments. In short, they are  
a Numher of heterogeneous Parts united into one Whole, which  
is Very corruptible, when put into a State that fits it for Cor-  
ruption; that is, a State of Warmth, Rest, and Moisture. To  
prevent the Fluids from thus corrupting, and consequentiy in-  
. fecting and changing all the other Parts of the Body, it is necef.

sary they should never stagnate or collect together, otherwise  
Cormption would immediately ensue: Whence these subtile,  
solid Particles, both unctuous and earthy, should not only he  
kept in perpetual Motion among themselves, but also circulate  
in a progressive Motion through the finest Tubes of the Body,  
that the solid Parts of the Blood may be divided into extremely  
fine Globules, by the Motion of Attrition, or Action and Re-  
action between the Juices and the fibrous Parts. Whence ap-  
pears the Necessity of an aereal, .ethereal Fluid, and elastic  
Principle, along with a large Quantity of an aqueous Fluid ;  
that is, the Necessity of pure Water, to secure this indispensa-  
ble Effect. And hence it is, that, upon examining the Blood  
taken from a Man in Health, we find, at least, two Parrs of  
**a** Fluid, for one of a dry and solid Matter; for I have fre-  
quentiy observed twelve Ounces of Blood to contain eight  
Ounces of a liquid, and four of a solid Substance. Again,  
that the Blood contains in large Quantity of a fubtile, aereal,  
and aethereal Principle, manifestly appears from its Bubbling *in  
Vacuo,* so as to run over the Edges of a cylindrical Glass,  
whereof it at first possessed only one half. From the Whole  
we infer, that nothing is more wholsome, nothing better fitted,  
or more necessary to preserve Lise, than Water ; which is *so*agreeable to the Nature of the human Body, and without  
which it can neither subsist, nor Life be long preserved.

Our next Position is, that no Remedy can more effectually  
secure Health, and prevent Diseases, than pure Water.. If we  
strictly inquire into the Cause of Health, we shall find it to be  
. an equable and free Circulation of the Juices through all the  
Canals of the Body, even the finest, That lead to the Excretory  
Ducts. For by this means it is, that what proves serviceable  
and fit for Nutrition, remains within, separated for Use by the  
proper Strainers; and what would either prove useless, corrupti-  
ble, and inconvenient to the Body, is discharged. And here it  
deserves the utmost Attention, that the Excretions of the Body  
do not so directly, simply, and absolutely regard Lise, as they  
indirectly regard Health, and the Exercise os all the Functions  
and Offices, insomuch that Health, and even Life itself, maybe  
endangered, without any Fault in the Excretions. Thus.'tis

obvious, that froth Violent Passions of the Mind, extreme Pain,  
Inflammation os the Stomach, and the swallowing os Poisons,  
the natural Functions os the Body are strongly disordered.  
Neither in the most obstinate Chronical Diseases are the Excre-  
tions so much to be regarded, as the Obstructions os the glan-  
dular Parts, the Indurations, Corruptions and Sphaceistions of  
the Viscera, and Extravasations os the Humours : So likewise in  
Acute Distempers, the inflammatory Disposition os the Blond  
is principally to be regarded; 'Tis therefore an equable Mo-  
tion of the Blood and Juices that maintains Health, promotes  
the Excretion of unnecessary Substances, affords a convenient  
Nutriment to the solid Parts, and procures to the Nerves and  
Fibres that most subtile Fluid, by means whereof they feel and  
-move. But whenever this free and equable Motion is obstruct-  
ed, whether by an Over-charge os Humours, their Viscosity, or  
by Weakness in the Spring or Tension os the moving Fibres,  
it becomes an immediate Occasion to Diseases, especially those  
we term Chronical ; for from these Causes proceed Stagnations  
of the Juices in the larger and smaller Veffeis, Obstructions in  
the Excretory Ducts, and Indurations in the Glandular Farts ;  
these are soon followed by great Impurities os the Juices,  
causing Pains and spasmodic Disorders ; and not long after, by  
Putrefactions, which are the Bane os Health, and the direct  
Opposite to Life. And thus are the true Causes os Diseases  
formed in the Body.

Every one who perceives the Justness of this Description,  
will readily grant, that a proper Fluidity of the Blood is highly  
necessary, to procure a free and equable Circulation; by mearis  
whereof the Vessels are kept always open. Obstructions pre-  
vented. Excretions secured. Stagnations and Impurities of **the**Juices hindered, and the Causes os Diseases cut off And whe-  
ther there be in Nature a better disposed Remedy for procuring  
this necessary Fluidity to the Blood, we leave to the Judgment  
of sober and experienced Physicians.- To us it appears, that **a**pure and subtile Water exquisitely divides the solid and Viscid ‘  
*Parts of* the Blood and Juices, so aS to prevent their coagulating,  
or coming together; at the same time that it drinks up the  
useless and recrementitious Matters of various Kinds, whether  
earthy, saline, or unctuous, and discharges them by the pro- ’  
per Outlets.

And hence, we conceive, proceeds the Reason why Drinkers  
os Water, provided it he pure and excellent, are more healthy,  
and longer lived, than such as drink Wine, or Malt Liquors ;  
and why it generally gives them a better Appetite, and renders  
them plump and fleshy. For certainly Water is a most appro-  
priated Menstruum to dissolve the Aliment, extract its Chyle,  
or nutrimental Part, and carry it through all ths innermost **and**finest Canals of the Body. Besides this, it readily washes off  
and dissolves that tough viscous Slime, which lines the glandular  
Coats of the Stomach, and Duodenum, whereby the dissolving  
Juices os the intestines, which are the immediate Instruments  
of Digestion, may more plentifully mix with the Food, and  
perform their Office. There goes a common Opinion, that  
the drinking of Water is pernicious to those who eat Fruit: But  
this is a great Mistake; for in *Spain, Portugal,* and *France,*Water is the common Liquor; and yet those Nations freely  
eat Fruit all the Summer, without any inconvenience. Again,  
those who drink Water, are observed to have much sounder  
and whiter Teeth, than others; for Putrefaction and Corrup-  
tion of the Teeth is Caused by the Scurvy, a Disease prevented  
by the drinking of pure Water, which actually cleanses and  
washes the Blood, and discharges the Foulness thereof./ Add  
to this, that the Drinkers of Water are much briiker and more  
alert to all the Actions both os Mind and Body, than such as  
use Malt Liquors, the greatest Parts whereof produce clammy.  
Viscid, and sluggish Juices, hardly capable os passing through  
the exquisitely fine Veffeis of the Brain and Nerves ; whence  
ensue Indolence, and Weakness of the Body, andanIndispo-  
sttion and Dulness of the Limbs, both to Sense and Motion..  
And as this plainly appears to be Matter of Fact, 'tis the more  
surprising, that the drinking of pure Water, which is so con-  
ducive to the Preservation both of Life and Health, should be  
fo perVerfly, and, as it were, unnaturally nauseated by **the**People of our Country, whilst it is as strongly coveted and  
admired in other Nations. Such Malt Liquors as are thick,  
and highly nutrimental, lay the Foundations of many Disorders  
among the Inhabitants of Northern Countries, more particu-  
larly where the Use of Brandies, Spirits, and Strono Waters,  
prevails. It is certainly much better for all Persons of delicate  
Constitutions, and sedentary Lives, to accustom themselves to  
the drinking of the finest and purest Water, either alone, or  
mixed with Wine, to render it more acceptable.

- Having thus considered the singular Efficacy of Water, by  
way *of Prevention, we come* next to examine what it will  
perform in the Cure os Diseases. Physicians divide all Distem-  
pers into Acute and Chronical. Qs tile Acute Kind, the  
principal are Fevers; which fr0m rhe Structure of the Body,  
and the Laws of Motion, appear to be an increase of the Blood's  
Velocity and Force, so aS to distend both the solid, or fibrous

and Suid Parts of the Body beyond their natural Size; this  
Increafe of Motion having a Tendency either to overcome and  
discharge the Caufeof the Disorder, or to destroy the Machine  
itfelfi Whence there ensues either Recovery, Death, or a De-  
pravation of forne Parts of the Machine, when the Disease ter-  
minates in another. And thus Nature, which is often her own  
best Physician, sometimes also produces Diseases and Death.  
But here we must by no means confound , the rational Soul with  
Nature, which is a Word we use to signify the Struolure, Me-  
chanifm, and Contrivance of the Body, acting with certain  
Powers, according to certain necessary and mechanical Laws,  
assigned it by its Maker. A Physician therefore, in the present  
imperfect State of Medicine, can do no more than supply a pro-  
per Matter to this augmented Motion in continued Fevers,  
during the whole Time they thus regularly continue ; for they  
have their own natural Periods, that cannot hitherto be safely  
stopped by Art. This increased Motion and Distension is at-  
tended with a great Heat, which violently dissipates the fluid  
Part of the Blood and Juices, so necessary to Life; whence  
the principal intention is to supply this fluid Part, in propor-  
tion as it wastes. And as the Tendency os this increased Mo-  
tion is to break through the Obstructions, that caufe the Dis-  
order, the Blood can by no means make its way, unless suffi-  
ciently thinned and diluted with a proper Fluid, but, thus  
assisted, if may allay the Heat and Inflammation, propel the  
stagnating juices, ana discharge the offending Matter that causes  
the Mischief: And Experience shews, that if Water be not  
the only thing, there is no better Remedy yet sound for this  
kind of Fever, than a free and large Use thereof. Whence  
*Hippocrates,* and others, highly recommend an aqueous Ptisan  
for this Purpose. And accordingly, by this alone, with **the**Assistance of Rest, and temperate Warmth, the most violent  
Fevers have frequently been cured, without any other Medi-  
cine. All that the best Physicians do in these Cases, is either  
to bleed at the Beginning, where the Bed' is full; or to exhi-  
bit an Emetic, if the Distemper is seated in the first Passages ;  
or to prescribe a Sudorific, in order to expel the offending Caufe,  
in the most expeditious manner; but after this, through the  
whole Course of the Distemper, they give nothin» more than  
cooling, moistening, and perspirative Remedies. The Caution  
required in the Usis of Water for this Distemper, is not to give  
it too cold, especially near the Crisis, and when there is  
Reason to fear an inflammation in the first Passages, nor when  
the Body is stiff and rigid, and the external Parts parched and  
bound up, but to wait sor the Time when there appears a Dis-  
position to sweat; for then ’tis ever proper to give Water in **a**large Quantity:

This is agreeable to the Advice of the best Physicians, and  
particularly insisted on by *Lommius,* in his excellent Discourse  
of Fevers.

Those called Chronical Diseases generally arise from an  
Obstruction *of* the Vifcera and glandulous Parts, or a Surcharge;  
and Foulness of the Juices, with a Stagnation thereof in the,  
larger Vessels; all which, according to the Rules heth of Rea-  
son and Experience, are therefore to be removed in order to a  
Cure: But to procure this Effecti there is not a more service-  
able Remedy than pure Water. How eminently serviceable  
the Medicinal Waters, heth of hot and cold Springs, are, for  
this Purpose, is a thing manifest by Experience. But the  
Seater Part of their Efficacy, in this respecti is, beyond all

ispute, owing to the Quantity of pure elementary Water  
they contain ; for it were insignificant to exhibit in these Di-,  
stempe'rs the mineral volatile Spirit, and the Salt, which  
such Waters contain, without that purely aqueoiis Pare And  
accordingly there are numerous Instances of pure and light Wa-  
ter, which, without containing any Mineral Ingredients, prove  
of extraordinary Efficacy in the Cure of Chronical Diseases.  
The Effect therefore can possibly he ascribed to nothing else,  
but the pure Water. Of this Kind there are numerous Springs  
in *Germany,* the Waters whereof, being pure and subtile, tho’  
plentifully abounding with Ar and AEtber, prove curative of  
most Chronical Distempers ; particularly the Stone, the Gout,  
the Rheumatism, the Scurvy, and Weakness in the Limbs;  
and by procuring th. requisite Fluidity to the Humours, they  
remedy Suppressions of the Haemorrhoids and Menses.

As there is therefore sufficient Reason to persuade us, that  
the Wholsomeness of many Springs depends upon the Good-  
ness of their Waters, it follows, that where other pure Waters  
are procurable, these likewise will have the same Effects. And  
this also is confirmed by Experience, as may appear from the  
Testimonies of *Riverius, Oper. Lila 4. Cap.* 24. *Celsus, Lib.* I.  
*Cap. to. Eallprius, Lib.* I. *Epidern. p.* Io6. *Sylvaticus, Cap.* I.  
*Observat.* I. *Marcianus, Rondesuius, AVisenna, Lib.* r. *Sect.* 2.  
*Cap.* 16. *p.* IC2. and others, who shew, that the drinking of  
Water has cured Obstructions of th. Menses, the Hced-ach,  
Ophthalmias, Colds, Rheums, Inflammations, the Gout, the  
Colic, *etc.* being used either cold or warm, as rhe ran

bear, or rhe weak Stare of the Nerves requires.

Of what singular Efficacy pure het Water is, heth by way  
of Preservative and Cure, appears from the Nature and Use

of Tec:drinking: For ’tis certainly a Mistake, to attribute ail  
the good Effects of Tea to the Leaves of the Plant. The  
principal Virtue of this Infusion is doubtless owing to the  
Quantity of the pure hot Waters employed in the Making;'  
whilst the Herb by its Astringency prevents the Fibres of the  
Body from being too much relaxed and weakened thereby.  
Therefore, as numerous Diseases are attended with a strong  
Contraction of the Fibres, all Physicians, who are well versed  
in Practice, will he cautious of indulging too free an Use of  
this astringent Ingredient in such Cafes. „

That Tea is an Astringent or Styptic Piant, appears by seve-  
ral Experiments, as particularly because, like Oak-bank, Ba-  
laustines, and other astringent Vegetables, it turns inky with **a**Solution of Iren, or the Chalybeate Waters. See THE A.

And, to speak a serviceable Truth, we have in our own  
Country many Plants, whose Virtues far exceed thofe of the  
*Indian* Tea : And Choice should be made of these Plants for  
Medicinal Uste, according to- the Difference os Distempers.  
Thus, for Example, in Diseases of the Breast, Paul’s Betony  
is proper; common Betony, in Disorders of the Nen.es., Baum  
and Penyroyal, in Disorders of the Uterus; Ground-ivy, in  
Ulcers of the Kidneys; Buck-bean, in the Scurvy, *etc.* being  
severally made into Tea, with the purest Water, and drank hot.  
Again, common Chamomile may be advantageonsty used in the  
way of Tea, against the Colic; Parsicy, in the Stone; **the**Ranunculus, in the moist Asthma. Rosemary Tea is by many  
recommended as excellent in nervous Diseases, *viz.* the Epi-  
lepsy, Palfy, and Apoplexy ; and for defending the Body, and  
preventing the catching of Cold ; especially is made with the  
Flowers of the Plant. But, in all Tea, ’tis a Cannon of Mo-  
ment, that the Water designed for the Infusion he not long  
boiled, but immediately poured upon the Plant as soon as it  
simmers strongly, in order to prevent the Loss of its more sub-  
ole Parts.

It remains, that we shew Water to he an universal Remedy,  
as it agrees not only with all Constitutions, but in all the Indi-  
cations of Distempers. And, first, the Drinking of Water is  
serviceable in every Complexion. In the Sanguine, and those  
of a soft Habit of Body, who here but few of the finest kind  
of Vessels, it causes the Blood and Juices to circulate freely ;  
which in this Constitution would otherwise flow but flowly,  
and so be subjeci to generate Obstructions in rhe Viscera. In  
bilious Habits, where the Humours are in brisk Motion, it  
allays the excessive Heat, which would otherwise evaporate the  
unctuous Parts of the Blood through the widened Tubes and  
Pores of the Body. It likewise proves extremely serviceable,  
by diluting and thinning the Viscidity of the Blood and Juices,  
in Persons of melancholy and phlegmaoc Constitutions.

Again, Water proves agreeable to Persons os all Ages.  
Children are frequently subject to violent Disorders from the  
Viscidity and Acrimony of the Milk they seed on, in which  
Case, besides Absorbents, diluting aqueous Remedies are of  
great Service. In Youth, the Surcharge and Thickness os the  
nutritious Humours produce various Diseases ; fuch as Colds,  
and Eruptions of the Skin, which are excellently remedied by  
the Use of diluting Liquors. And the fame bolds true of the  
Diseases of grown Perfons, and Persons in Years ; in all which  
the drinking of Water is serviceable. For Men of full Growth  
are very subjedl to Inflammations and Fevers, and old Men to  
such Disorders as proceed from Stoppages and Obstructions; in  
which Circumstances, there can nothing be given more proper  
than the finest Water, either hot or cold. We find, by daily Εχυ  
penence, what severe Disorders are occasion’d by Irregularity in  
the Menstrual and Haemorrhoidal Flux, to reduce which to their  
natural Periods, and preserve them in their proper Course, I am  
convinced from practical Observations, that Doming is mote  
essectijal than diluting aqueous Remedies.

'“’Tis well known, that a Fulness of Blood and Juices brings  
on many Distempers; but, to prevent this Fuiness, the most  
appropriated thing is hot Water, made into an Infusion with  
Hcrbs; which thus, by dissolving the glutioous Humours, pre-  
vents the Mass of Blood from increasing too fast. A free Use  
of Water is no less serviceable in purifying bad Juices; as it  
readily washes off their impure saline, arid drossy Parts, through  
all the excretory Passages of the Body. Besides this, the drink-  
ing of Water promotes all the Evacuations, preserves the Belly  
soluble, keeps the urinary Passages open, washes and cleanses  
the same from the Adhesion of gravelly or stony Matter, and  
powerfully promotes that most healthy Discharge of insensible  
Perspiration. Lastly, Water is the effectual Vehicle of all  
other Remedies. Thus Antifcorbutics, and vegetable Medi-  
cines appropriated to cleanfe the Blood, prove of little Service  
in cotreoling the Depravities of the Humours, unless by the  
Assistance of Water their Virtue be carried into the Juices and  
remote Parts of the Body, in the Form of Decoctions or In-  
fusions. To sem up all, in whatever Cases there is a Necessity  
either for altering, evacuating, opening, or resolving. Water  
is at all times the best of Remedies.

As Water is thus extensively useful, it may he proper to ob-  
serve, that they who cannot procure the purest and best Sore

thereof for Medicinal Use, must ferve themselves with such  
Rain or Riser-water as can be had ; but if these be not obtain-  
able in tolerable Purity, the heft way is to distil them I.or elied  
upon a flight boiling, to correct them, by the Addition of cal-  
cin’d Hartshorn. It is doubtless a singular Benefit *of* Nature,  
to heve large Cities and Countries well watered with wholfome  
Springs, which thus bountifully fupply so much better Remedies  
than thofe of the Shops. If every prudent and disinterested Phy-  
sician would carefully examine into the Waters of the Place  
where he resides,, ' he might thence assuredly practise more to  
the Satisfaction of himfelf, and Service of his Patients, than in  
the common way, by the miscellaneous Vie of numherless un-  
certain Remedies. *F. Hoffnum.*

From what has been Taid above, the great Uses and Advan-  
tages of drinking Water, both .with rcspedt to the Prevention  
and Cure of Diseases, will be sufficiently evident to every intel-  
ligent Reader. I shall riow proceed to consider distill’d  
Waters.

*Of Distilled and Medicated Waters.*

The Waters ordered to be kept in the Shops ate' either *firn-  
ple, compound,* or *medicated.* There are several ways of pro-  
curing simple Waters from Plants by Distillation, suited to the  
Natures os the particular Vegetables made use of. The Irrstru-  
ments usually employ’d in the Distlllation of simple Waters, are '  
of two Kinds, comrnouly call’d the hot and the cold *Still.*The Contrivance of the first *of* these is sufficiently in every one’s  
Acquaintance, so as to want no Description ; and the Reason  
why it hath, been called the cold Still, seems to be, because no  
more Heat is required than to raise a Vapour, which is returned  
down slowly by Drops into a Receiver. The other is a Copper  
Vessel, worked by a strong Fire, which boils the Materials,  
and fends .over the most volatile Parts in an hot Steam, which  
is condensed, and cooled in its.Dcscent by a long spiral Pipe,  
contained in a Vessel of cold Water, called its Refrigeratory,  
from whence it falis in a continual Stream.-

The first of these seems best fitted to draw off the Virtues os  
these Simples, which are. valued for their fine Flavour when  
green, which is very fubjedt to be lost in drying. Thus Baum,  
Meadow-sweet, damask or white Rofes, and all things of the  
like Propersies in this refpect, give over much finer scented  
Waters this way, than by the het Still ; the Heat there re-  
quired, and the Quantity of Water necessary to prevent their  
burning to the Still, very much injuring, their natural Flavours.  
.. But when; thus managed, they require no Water to be put to  
them,, nor to be bruised, but should be committed to the Sull,  
just as they are fresh gathered ; and as much is to he drawn off  
as their natural Moisture will. allow ; the Fine required in this  
Cafe being not sufficient to caufe an Empyreuma,' because it is  
only just enough to make the Top of the Still moderately warm.  
Whoever hath feen whet in the Shops is called a Rose-cake,  
may easily conceive in what Condition the Materiais are lest,  
which are thus.distssiid. i And as to the Damafk-rofes in parti-  
cular, aster they have been thus treated, they will give to a De-  
coction all their purgative Virtue, and make the Syrup ordered  
with them better than when managed any other way. And it  
is-not only very remarkable concerning Materiais thus to he or-  
dered, that they are hurt by the least Mixture of Water, which  
makes it a Rule .to gather them, dry, whilst the Sun is upon  
them, arid commit them forthwith to the Still, in order to have  
their Scents in Perfection; but that even bruising them destroys  
their fine Flavour, as any one rnay be easily convinced by Trial.  
*Boerhaave,* however, directs these Vegetables to he gather’d  
with the Dew upon them:

But the fatter Contrivance , of the hot Still seems best calcu-  
lated to raise those Materiais which have vigorous, strong Scents,  
and which will not be injured by Fire, or any Mixture of corn-  
mon Water with them, such as Hyssop, Penyroyal, and the  
like, which from their natural Production heve something hot  
and fiery in them. But then we are taught by common Expe-  
rience, that these give over their Virtues this way miich better  
when dried, than when green, as every one may observe in In-  
fusion or Decoction of there things; for, whengreeis, they make  
either of them more foul, and yield less Taste of the Piant, than  
when dried,sand the.Water, so drawn hath the fame Disad-  
vantages. - . . - : .. . : ..

. Tint Diversity in the Materiais coming under this Manage-  
rnent, which requires such different Treatment, seems chiefly  
to consist in mis : The lighter and finer sconced Plants, whofe  
natural Flavours cannot be preserved to them in drying, and  
which we most covet to preserve in their distill’d Waters, are  
best ordered.by a flow Heat, without any Mixture because by  
their drying, it appears, that their proper Juices are the best and  
only Vehicles for thofe Flavours. But Things, whose Scents  
and Medicinal Properties consist in somewhat more gross and  
fixed than will exhale with their natural Moistures, do better  
give out to common Water, by Infusion, those very Parts  
which we want to force from them by Distillation ; and in no-  
thing arc we more ohvioufly diredted by Nature, than in this  
Proced ure. Where we want to blend something into this Fonn,

that is so sight and volatile, as not to subsist in open Air any  
longer than it is in its Growth, it is certainly best removed from  
the Condition Nature left it in, into an Instrument, where, aS  
it dries; these volatile Parts can he collected and preserved.  
And what we call the cold SUU is such an Instrument, where  
the drying of the Plant or Flower is only forwarded by a mode-  
rate Warmth *y* and all that arises from it, is saved for the Pur-  
poses of Medicine:: But when what we want from a Plant is  
not volatile enough to rife with its natural Juice in leifursly  
drying, it is highly reasonable to think this way insufficient to .  
raise it, and therefore we must have recourse to fuch Means as  
have heen taken Notioe of in the other Process of the het Still.  
*Quincy’s Pralect.-*

*An Example of a JVater procur’d by the cold Still, from*Boerhaave. ...

Take Rosemary, fresh gather’d, in its Perfection, with the  
. Morning Dew upon it, and lay it lightly and unbruised  
'--upon the broad round Plate within the common cylindri-

cal Furnace, the Piate being first made clean, and fixed at  
: the Height of two or threelnches. Then cover the Fur-  
" nace with its large conical Still-head, and apply a Glafi  
.-'Receiver to the Nose thereof. In the Fine-place of the

Furnace put A lighted Coal, that does not smoke, and  
-- raise an equable Degree of Heat, not exceeding eighty-five  
s ’Degrees on *Fahrenheits,* Thermometer ; and let this Heat

be kept up fo long as aay Liquor comes over. Then take-  
. ing away the Plant, put in fresh, and proceed as before j  
-- continuing to do this successively, till a sufficient Quantity  
" of the Water be procured. Let this distilled Liquor he

kept at Rest, in a clean Glass, close stopped, for sorne  
Days, in a cold Place; whereby it will become limpid,

. and have-the Taste and Odour of the Plant.

*. fscsiNNsiflo*R EM Α R K S.

In this Water are contained the Liquor of Dew, consisting of  
its own, proper Parts, which are difficultly separated from the \_  
-Plant, and cleave to it even in the drying.. This Dew also,  
by sticking to the Outside, receives the liquid Parts of the  
Piant,1 which being elaborated the Day before, and exhaling  
in the Night, are hereby detained ; so that they concrete: to-  
gether into one external Liquid, which is often viscid, as ap-  
pears in Wax, Manna, Honey, *etc.* This Water also con-  
tains the Fluid which exhales from the Vessels of the Rose-  
in ary, and which principally consists of simple Water, as  
appears upon long standing in , an open Vessel, when the  
Taste and Odour vanishing, leave an insipid Water behind.  
-Another Part of this Water is that subtile, volatile Substance,  
which gives the Plant its peculiar Taste and Odour ; for these  
the Senses discover in at; but the Remains of the Process  
scarce afford any thing thereof, .This same Water seems also  
‘-to contain Seeds, or other little Bodies, whicbin a certain  
time ufiially grows into a kind of thin, whitish Weed,  
siifpended in the Middle of the Water ; and, daily increasing  
or spreading itself, becomes a Mucilage, which did not ap-  
pear at first. ' -

I have kept these Waters undisturbed in separate well-cloied  
:Vessels, and observed, that in a Year's time, they began to  
-appear thick, which Thicknefs gradually' increased every  
.Year, till at length the whole Liquor grew roapy of muci-  
ilaginous. Hence this Water contains the elementary Water,  
.and presiding Spirit of the Plant, a Spirit small in Bulk, but  
.rich in Virtue, and exhibiting the specific Smell and Taste of  
ι-the Subjects .. This Water,-therefore, in exhaling, proves a

Vehicle to that Spirit which contains in a small, subtile, ex-  
tremely volatile, and .thence easily separable Substance, the  
particular Virtue of the Plant, leaving the Remainder ex-  
hausted in this respect ; And hence proceeds the‘Medicinal  
Virtue of these Waters, which principally depends upon their  
. native Spirit. For this Spirit, having a brisk Mobility in most

Plants, affects .the Nerves, and raises the Spirits in wse of  
their Depression, r But besides mis common.Principle of  
Action, Plants heve another peculiarly appropriated to each,  
and of wonderful Efficacy: This, in the Language of *Para..'  
celfus,* is called their *Appropriated Essence.*

The odoriferous Scents, both of Lavender and of Baum, agree  
in this, that they excite the languid Nerves; but the Smell of  
Lavender,-.besides this, has another particular Virtue, and so  
has Baum. From the Virtue of Plants proceed wonderful  
Effects in the Body, which can only be learnt from a faithful  
History of Plants, where their Virtues, founded upon Expe-  
rience, are delivered. This peculiar Virtue has often a con-  
trary Essectito the common. The *Indian* Hyacinth has an  
extremely fragrant Odour, but excites strangeSpasms in Hy-  
pochondriacal Men, and Hysterical Women. Rue also dif-  
fuses a very strong Scent, which cures the Spafms occasioned  
by therformer-Odour. . -

We must also observed that human Industry has discovered,  
that this sine Vapour of Plants is productive of those strange  
Effects occasioned by vegetable Concretes, as well in. the wav

of Evacuante, as Alteratives ; because if this alone he total!]  
separated from Medicinal or Poisonous Plants, the Remain-  
der, tho' without almost any sensible Loss, of Weight, lose  
dll that Efficacy. Hence a Chymist should be cautious ant  
reserved in assigning the Virtues of these Waters, and learr  
sor some time before he pronounces with Certainty. From  
these Observations we may say, that these Waters will fre-  
quently cure Fainting, and prove agreeable in the way of Per-  
fume ; for nothing more directly proves more refreshing, and  
enlivening to the Brain and Spirits, than such a Water *oi  
Baum or Rise,* each of them full of the respective Spirit of  
the Plants.

If the Vestel he close flopped, and set in a cool Place, the Wa-  
ters will retain their Virtues for a Year; but if negligently  
kept, or any Crack should happen in the Glass, their ex-  
tremely Volatile *Spirit secretly* flies off, and leaves the Water  
vapid. Our Experiment also shews us, what it is winch  
Plants lose by being dry'd in the Summer's &m, *viz.* The  
, Water, and the Spint we have been *describing.* Hence also  
we know the Nature of that Fluid, which first rises from  
Plants in Distillation, and what that Matter properly is in  
Plants, which gives then peculiar Odour, that is, their pre-  
siding Spirit. Lastly, we hence learn, in some measure,  
whet those Effluvia are, which principally, in the Summer  
Season, and the open Air, exhale from Vegetables ; for it is  
highly probable, that these constant Exhalations of Plants,  
especially in the Day-time, have a great Agreement in their  
. peculiar Nature with the Liquor produced in our present Pro-  
cess, tho' differing in this, that the Exhalation is made from  
Parts continually recruited by the Root; whilst in our Expe-  
riment those Parts alone are collected, winch are driven off  
froth the Plants, after being gathered, and no longer supplied  
with fresh Nourishment. Whence the diligent and ingenious  
*Dr. Hales* observes, in his *vegetable Statics,* that the Distil-  
lation of the Juice received in Glass Vessels, artificially ap-  
- . plied to recent Incisions of Plants, in the Summer Season, is

of a different Kind from common Distillations.

Hence we may understand, that the various, peculiar, and  
often surprising Virtues of Plants, may he widely diffused  
thro’ the Ain, and carried to a vast Distance by the Winds.  
So that we must not presently account as Fables what **we**find related in the History of Plants, concerning the sur-  
prising Effects of Effluvia. The Shade of the Walnut gives  
the Head-ach, and makes the Body costive. The Effluvia of  
the Poppy procure Sleep. The Vapour of the Yew-tree is  
reputed mortal to those who fleep under it; and the Smell of  
Bean-blossoms, if long continued, disorders the Senses. The  
strong Action of the Sun upon Plants certainly raises Exhala-  
tions of great Efficacy, by means of the Spirits they diffuse; .  
and the Motions of the Winds carry them to a great Distance.  
The dark Shades of thick Woods, where Vapours are con-  
**tracted,** occasion Various Diseases, and often Death, to those  
who reside among them, as appears by melancholy Examples  
*in America,* which abounds with poisonous Trees. For this  
Spirit of Plants is a thing peculiar to each Species, absolutely  
inimitable, nor producible by Art: It has therefore Virtues  
peculiar to itsels, but such as are strangely agreeable to **the**human Spirits. But because the Spirits os some Plants are  
Very manifest to the Senses, whilst those.os others scarce af-  
sect our Organs of Smell and Taste by any sensible Action,  
the ChymistS have chiefly destin'd to this first Process those  
. .Plants which are remarkable for their grateful Odour. Such  
as those of the following short Catalogue, for Example,  
taken from **the** *European* Ossicinals,. **and a few** of the  
*Indian. ‘ .*

|  |  |
| --- | --- |
| **- PLANTS.** | |
| Angelicae | Fennel, |
| .Anise, ... . | Feverfew, .. |
| Basil,. | Gaisngai, |
| Banns, . | . The Garlicks, |
| jays, ... | Heartwort, .r - ἐν |
| The Calamints, | Hyirop,. ... . .... |
| Calamus Aromaticus, | jessamine,. |
| Cainway, | Lavender»^ . . |
| .Cardamon, . | Leeks» ' |
| Cassia Aromatics, | Lemons,. |
| Catmint, | Lily of the Valley,, - |
| : Celeri, | Lily-white,; .χ . . . |
| Chamomile, Chervil, | LoVage, . sset.ss Mace, |
| Cinnamon, | Marjoram, ... .... - t |
| . Citron, " - | Marum Syriacurn, |
| Clary, | Masterwort, |
| Clove Jaly-flowers, | Mastichina, common Ma\*. |
| Coriander, | rem. |
| Cresses, | The Maudlin Tansies, |
| t ΗΤΤΠΐΚ | Melilos, |
| .'DishE | Mint, |
| Dittany\* | Motherwort!.  r |

|  |  |
| --- | --- |
| **Nutmeg, .**  Onions,. | Scurvy-grass, The Southern-woods, |
| Orange, | §pignd. |
| Origanum, | Tansy, |
| *Philadelphus Athenai,* | Or Tuberofe, |
| *fingse white* Pipe-tree, | Valerian, |
| Polium,. | Victorialis, |
| Roses, | Violet, |
| Sastron. | . Walnut, |
| Sage, | Wild Thymes |
| Savory, TREES. | |
| Bay, | Mastich, |
| Benjamin, | Myrtle, |
| Box, | Orange, |
| cedar. | Peach, |
| Citron, | Pine, |
| Elder, | Rose, |
| Fin, | Sassafras, |
| Guaiacnm, | Savin, |
| Juniper, | Storax, |
| Lemon, | Thuya, or Life-tree, |
| Dime, | Walnut. |

Several of these Trees contain, in their different Parts, an aro-  
matic, 'Volatile Matter, which may he obtained in this first  
Operation ; for sometimes their peculiar Virtue resides in the  
Root, as the camphorated Balsam in the Cinnamon-root; or  
in the Wood, aS in the Rhodium Wood ; in the Bark, aS in  
Cinnamon; in the Cotkins, as in Walnuts; and frequently  
In the Flowers, Leaves, and Seeds : Again, in the Waters  
that distil from them, as in the Walnut; in their Balsams,  
Gums, Tears, and Rosins, as in the Balsamic Trees,  
*Bocrhaavgis Chemistry, Fol. Ί. Proces.s i.*

The much greater Tediousness and Expence of working with  
the cold than the hot Still, makes very few care to com-  
ply with it.; so that where any thing os Moment is depended  
upon from this particular way, great Care ought to be taken  
mot to he deceived therein.

But to avoid the Tediousness of the one, and the Inconveniences  
.of the other, of these ways, there hath lately obtained *3.*.Con-  
.triVance something between both, which is by suspending, in  
a Copper Still, conveniently silled with Water, a Pewter  
.Body, which is to hold the Materials to he drawn off; an  
Head is fitted to the latter, which joins to a spiral Worm,  
in a Refrigeratory of cold Water, as in the common hot  
Still. Ingredients thus distilled, which is *in Balneo,* have **a**: greater Heat given them than in the cold Still; and yet by the  
Interposition of the Water, in which the Vessel containing  
.them is suspended, they have not the Fine so forcibly acting  
upon them, as in the common way of the hot.Still: So.  
that all those things which require a middle Way between the.  
other two, are hereby well provided for, as, amongst the  
Simples, Mint, Angelica, Chamomile, and some others-  
which are of a Texture between Very volatile and Very  
.fixed. And amongst the Compositions,., the *Aqua Lactis*

*Alexitocia,* the softer Snail-waters, and those of similar Pro-  
. perries; but neither the very fine-scented Simples, nor **the**heavier Compounds, Can be thus Ordered, but to. Disad-  
vantage. . . .

One os the greatest Advantages Of this Contrivance is, that  
.Waters so drawn, come over much,cooler than, from the hot.  
..Still, that is, they have not. so much of the Fire in them (as.

it is commonly termed); so that an. hot fpicy Water, thus,  
ordered, shall taste as cool upon the Palate when just, drawn, .  
aS. in the other way it. would do after it had acquired aconsi-

- durable Age. But another great Benefit is. likewise. obtained.  
this way, and that is, the avoiding, that Fouiness'in theWa--

. ter coming over, which arises from too great Proportions of  
. oily Ingredients in .the ordinary Distillation: For. shod a Come  
position he considerably, overcharged.with .things of this Dispo-  
fition,. yet, thy the Relaxation of Heat in tins Contrivance,  
they are fo. much less forced over, that the Water will he

: much fines. Yet, whether aDiminutionin the Quantity of  
. Ingredients, or in .the Force to raise them, is the more eli-

gible way to avoid this Inconvenience, I will not pretend,  
to determine ;, though I most incline to the latter, because,  
without, doubt, they are. the. finer. Parts Of the .Aromatics:  
which first rise, and consequently they must he best which:

i come over. with .the least Force. But this way is practicable:  
Only with those Waters which are to Come over highly spiri-.  
tUous, heeause there is not. here, Force enough to. raife the:  
Others. .

**In** this.View,. if we pass over the simple Waters wherein we **are**i directed to draw, these Properties, we shall find, that both the  
. Wormwoods, the Carduus, and the Fumitory, are in no.

respect, fitted for this Management: AS to the first, if they.

- have, any; Scent that will come over, it is .so much the  
worse.;, because they are.to most, very offensive, especially.  
**that of. the.common Wormwood;** and all **of** them have them.

Medicinal Virtues only in a bitter, earthy Sait, that will not  
- rise in the Still, and is to he come at only by Decoctinn. Ce-  
. landine. Parsley, and Saxifrage, have nothing in them Volatile  
to send over in Distillation, but abound with a nitrous Salt,  
that proves diuretic, when order'd in proper Forms; and the  
- Plantain and Oak-buds yield only a viscid, mucilaginous Juice,  
which will afford nothing over the Heim but an insipid Phlegm,  
- . that will soon mother and grow ropy. The same is chargeable

-upon the Frogspawn, Succory, and Eychright, which like-  
wife give over nothing difcernible in aWater ; and whet comes  
from Fennel soon grows rank, and is fo ill-scented as not to he  
endur'd, besides, its Aptness to grow ropy. From Flowers, as -  
-those of Oranges, Chamomile, Rosemary, Damalk-roses, and  
-Elder, the most fragrant Waters are procurable ; but from '  
.the rest Very little of Value. The Citron-peel also, among the  
Prints, makes a most delightful Water ; but neither Rasp-  
herries nor Walnuts send over any thing that will smell, taste,  
\* or keep. The Water from black Cherries seems, by much,  
-the best we have in the Shops for a Vehicle ; the Kernels give

in an agreeable Flavour, and there is so much of a Spirit in the  
Juice aS preserves it the Year round, when carefully distill'd,  
. without Decay: But this we are frequentiy cheated in, some  
’making it from the Stones only, which those, who express the  
Juice for other Purposes, sell at a cheap Rate; tho' those taken  
Out from Brandy, where the Stone hath not been before  
.broken, make this Water well enough; hut some are not

contented only with these Pieces of good Hushandry, but  
make it from Other Kernels, and often from nothing but bit-  
ter Almonds. These Frauds are not easily discover'd, unless  
the substituted Materials he crouded in such Quantities,  
(which commonly happens from the Encouragement of their  
Cheapness) that they shew a Foulness which is not at all  
. perceivable in the genuine Water.

**It** may indeed, in some Cases, with good Reason, be requir’d to  
; have simple Waters under the Denomination of Coolers, or  
such as have no other Property than heing soft Vchicles to other  
Things;. and these are best procur'd from- inodorous or soft  
Substances, as Plantain, Frogspawn, and the like: And cer-  
. tainly, a distill’d Water is more strictly and simply elementary,  
and more a Dilutes, than any other; but it is almost impossi-  
ble to keep these the Year round, which can be had only from  
Vegetables at certain Seasons ; and therefore such as are de-  
find for. mere Diluters, or Coolers, may possibly be had  
fresher drawn, at any Season, from Substances of like Smooh-  
iness and Texture. The simple Waters, indeed, from the  
slighter scented Plants, as Baum, and the like, are Very sub-  
ject to the same Decay ; but that may, in: some measure,;he  
.remedyin by sprinkling the. green Herb, hefore it is put in  
.the Still, with a little Spirit, whichwill he sOfar from a Pre-  
judice to the Flavour of the Water, that-it will rather help  
.and improve it. *squincapis Pralect. Pharm.*

*Example of a distil?d Water of a'fresu Plant, by thr Alembic,  
fiewn in Rosemary. From* Boerhaave.

.We are now to inquire into that Part of Vegetables, which,  
heing separated hy the Heat os boiling.Wates, sties off into the  
Air. The most commodious Operation for this Process,-is  
that perform'd by a still Head, closely fitted in to the Mouth of  
a Vessel, so aS to collect and condense the Vapour arifing by a  
boiling Heat, and transmit it without Loss into a-Receiver. We'  
are now to collect whatever flies off from-a recent Plant, by  
the natural Degree of tho Summer's Heat, up to that of two hun-  
dred and fourteen Degrees : And for thia Purpose we shall again ’  
make Choice of Rosemary, that the Operation may he duly  
compared with that given above upon the same Subject ; tho',  
instead of this, any other of the sapid and odorous Plants,  
enumerated as fit Subjects for the preceding Process; might he  
here employ’d, all' which contain, an inflammable,, oily, and.a  
fixable saline Part, as also a saponaceous one,, consisting of the  
two. The Plants design'd for this Operation are .to he gather'd'  
when their Leaves are at full Growth, and a little before **the**Flowers appear, or hefore the Seed comes on; because-the Vir-  
tue of the Subject, expected in these Waters, is often littie,  
aster the Seed or Fruit is form'd, at which time. Plante begin to  
languish: The Morning is best to gather them ‘in,, because the  
Volatile Parts are then condensed by the Coldness of the Night,  
and kept in by the Tenacity of the Dew, not yet exhaled bV the  
Sun.. This is understood, when the Virtue Of the. distill'd  
Water principally resides in the Leaves of Plants, , as it does in  
Mint, Marjoram, Penyroyal, Rue, and many more, but the  
Case differs, when the aromatic Virtue is only found in the  
Flowers, as in Roses, Lilies of. the Valley, (ffc. in which **Case**we choose their flowery Parts, whilst they smell : the sweetest,  
which should be gather'd hefore they are ouite open'd, or begin  
to shed; the Morning Dew still hanging upon them.;: In other  
Plants the Seeds are to he prefefr’d, as in Anise, Caraway,  
Cummin, *etc.* where the Herb and the Flower'are indolent,  
but the tvhole Virtue remains in the Seed alone, where it mani-  
festa itself by its remarkable Fragrance, and aromatic Taste.  
We find Seeds chiefly,possess'd .of this Virtue**.whenrcome to**

perfect Maturity. We must not omit, that these desirable Pro-  
perties are found only in the Roots, of certain Plants, as appears  
in AVens, and inOrpine, whose Root sinelis like a Rose ; and  
here the Roots should be gather'd, for the present Purpose, at  
that time when they are richest in these Virtues, which is gene-  
rally at that Season of the Year just before they begin to sprout,  
when they are to he dug up in a Morning. Is the Virtue here  
requir'd he contain'd in the Barks or Woods of Vegetables, \*  
then these Parts are to be chosen for the Puspofe.

I. The Subject heing chosen, let it he bruifed, or cut, if there  
he Occasion, and with it fill two Thirds of a Still, leaving a  
third Part os it empty, without squeezing the Matter close;  
then pour as much fresh Rain-water upon it aS will fill , the  
Still to the fame Height, that is, two Thirds, together with the  
Rant: Fit on the Head exactly to the Neck of the Still, so  
that no Vapour may pass thro' the Juncture, which the Copper-  
smiths can order to Perfection. Let thejoining of the Nose of the  
Still-head to the Worm he luted with a stiff Pasta, made of  
Linseed-meal and Water. . Observe, that the Cavity of the  
Worm be always cleansed by passing fair boiling Water tino' it,  
lest otherwise the distill'd Water should be foul'd. Apply a  
Receiver to the Bottom of the Worm, that no Vapour may fly  
off in the Distillation; but that all the Liquor, heing cool'd in  
the Worm-tub fill'd with cold Water, may he collected; which  
is best perform'd by keeping the Worm-tub continually supplied  
with cold Water.

2. Things being in this State, digest for twenty-four Hours  
with a moderate Degree of Heat, os I5D Degrees. Afterwards  
raise the Fine, fo as to make the Water and the Plant boil;  
which may he known by a certain hissing Noise, proceeding  
from the breaking- Bubbles of the boiling Matter; as also by  
the Pipe of the Still-head, or the upper . end of the Worm,  
hecoming too hot to he handled; or the Smoaking of the Wa-  
ter in the Worm-tub, heated by the Top of the worm; and  
lastly, by the following of one Drop immediately after another,  
from the Nose of the Worm, fo as to make nd almost continued  
Stream. By all winch Signs we know, that the requisite Heat  
is given; and if it he less than a gentle Degree of Ebullition,  
theVirtue here expected’will not he rais'd : But when the Fire  
is too great, the Matter hastily rises into the Still-head, and  
fouis the Worm and the distill'd Liquor ; and the Plant being  
also rais'd, it blocks up the Worm ; for whichReason it is pro-  
per to place a Piece of fine Linen,- artificially, at the End of  
the Still-head Pipe, that, in ease of this Accident, the Plant  
may he kept from stopping up' the Worm. But, even in this  
Case, if the Fine he too Violent, it will‘throw tip the Herbs into  
**the** Still-head Pipe;: whence the Passage being, stopp’d, the  
rifing Vapour will forcibly blow off the Head, and throw the  
Liquor and Steam'about, *so* as to do much Mischief, or eVen to  
suffocate the Operator, without a proper Caution ; and the  
more oily, tenacious, gummy, or resinous the Subject is, and  
consequentiy the more frothy and explosive, the greater Danger  
therein, in case of this Accident.

3. Let the due Degree of Heat therefore he carefully observ'd,  
and equally kept up, so long as the Water, distilling into the Re-  
ceiver, is white, thick,odorous, sapid, frothy, and turbid; forthis  
Water should be kept carefully separated from that which will fol-  
low it: Whence the Receiver must be often chang'd, that the  
Operator may he certain, that nothinghut this firstWater homes  
over; for there afterwards rises aWater that is'transparent,  
thin, .and without the peculiar Taste and Odour of the Plant,  
but generally somewhat tartith and;limpid, shod somewhat ob-  
; sour'd and foul'd by white dreggy MatterAnd if the Head os  
the Still be not firm'd, the Acidity/of this last Water causes it  
to dissolve the Copper, so as to become green, nauseous, emetic,  
and poisonous to those who use it, especially weak Persons and  
young Children, as operating both upwards and downwards,  
with severe Gripings. If such a Misfortune should happen, it  
is remedied by drinking plentifully of Milk, sweeten'd with  
Honey, or of the common emollient Decoctions.

. 4. The first Water, above describ'd, principally containsthe

: Ost: and presiding Spirit of the Plant, and always somewhat  
saline, which in most Plants is acid, but in the moth pungent

s Antiscorbutics a . Volatile Alcali; for the Fire, by boiling **the**Subject, dissolves its Oil, and: reduces it into small Particles,  
winch are carried upwards by the Assistance of the Water,  
” along.with those Pares of the Plant thatthecome Volatile with this

Motion. And if the Veffeis are exactly closed, all these, being  
united together, will he discharg’d without Loss, and without  
much Alteration, into the Receiver annex'd ; for, if we:may  
- trust our Senses, these Waters are richly impregnated with the  
-- Odour, Taste, and particular Virtues of the volatile Parts of’

Plants: Hence, if the Botanist justly, assigns the Virtues of any  
Plant, as they are contain'd in that Part which is Volatile by a  
Ψ helling Heat;, the Chyinist dan present those Virtues separated  
.: from the rest. The former was attempted by *NlrsTournefore,*

in his Book of Rants spontaneousty growing. about *Paris*;. and  
. by Mr. *Ray,* in his Book of the native Plants of *England.  
in Dodonaeus* has perhaps spoken too boldly, and sometimes rashly,,  
st of them all, especially in. thedast Edition of his Work,.printed

at *Antwerp* in 1644. I have expresty observed, that the siriPof  
these distill’d Waters contains only the Virtues of the Plants,  
residing in that Part which is volatile with this Heat; because,  
in the whole mix’d Juice of the Plant, there is a certain Virtue  
depending upon a Mixture os this first Water, and the Liquor  
remaining aster that is drawn off. The fresh express’d Juice of  
recent Mint has certainly many other distinct Properties than  
the distill’d Water thereof r Whence Physicians are to observe,  
that the Virtues os this Water, and os the native Juice, are  
not the same, but very different.

5. The Water of the second Running wants the Volatile Part -  
above describ’d, yet scarce brings over the more fix’d Part of  
the Plant, except what is somewhat acid and Vapid : Is, when  
this is come off, fresh Rain-water he pour'd upon the remain-  
ing Plant, and boil'd therewith, or strongly distillM, there rises  
a more acid Water, containing Very littie os the particular Vir-  
tue of the Plant; almost the same kind of Acidity appearing to .  
rise thus from them all at last. This I may Venture to affirm,  
upon Experience, that the Virtue of destroying Worms, which  
the more celebrated Physicians have justly attributed to certain  
distill'd Waters, depends upon this, that the Acid os the Water  
os the last Running dissolves the Copper, and thus acquires a  
Virtue not its own. This Operation, however, shews, that  
Plants, contain an, acid Salt so Volatile aS to rise and separate  
from the Subject, with 2I5 Degrees of Heat. But Experience  
shews, that the Water of this second Running has scarce any  
other Virtue than that- of cooling; as may be safely tried by  
using a Glass Still-head instead of a Copper one, by winch,  
means the Inconvenience of its diflblving the Copper is pre-.  
Vented.

6. And this is the best Method of preparing the distill'd offi-  
cirtal Waters, provided the two Sorts be not mix'd together,  
for both os them would be spoil'd by such a Mixture ; they -  
also spoil with keeping, and will seldom remain perfect .a  
Year.

REMARKS.

.- We learn from the present Process,

i. Whet a Plant parts with by the Heat of boiling Water,  
. that is, the Water of the preceding Process, the Volatile Oil -  
- with its inherent Spirin, and a saline Acid.

i. Whet remains in the Still after the Separation of these three -  
I Parts; that is, the Extract, the Earth, and the Salts.

3. In what Part the Odour and Taste of a Plant reside; that is,  
in the Water, in the Volatile Oil contained in this Water,

. and in the Spirit contain'd in this Oil. *A*

An Hence is easily known what exhales by helling, both inl  
. Cookery and Pharmacy, and what remains hehind. If Cost-  
mary, Chervil, Baum, or Smallage he boil'd in Broth, they.

: lose their peculiar Smell and Taste, with the Virtues thereon  
. depending, and only leave hehind their common ungrateful  
Parts ; but if cut small, and added to the Soop already pre-  
pared, and kept hot, but not boiling, in a Vessel close co-  
. Ver’d, so as to infuse for a while, they communicate their  
peculiar Virtues thereto. Cinnamon affords an extremely -'  
grateful Water, which surprisingly warms and exhilarates ;

- but when this is all come over, there follows another that is  
acid and indolent, leaving an acid, austere, and cooling De.,  
coction behind, resembling that of Oak-wood.

5. Hence it plainly appears at what time, with the same Force  
, Of Fire, quite contrary Virtues may arise from a Plant; for  
***so*** long as a milky Water comes over from such Plants as are  
'. aromatic, so long the Water remains warming and attenuat-  
ing ; but when if comes thin and pellucid, it is acid and

. cooling.

6. In the. last Place, we have hence the true Foundation for :  
the conducting of Distillation ; for if the Operation he stout  
as soon as ever the white Water ceases to run off, the Prepa-

. ration , will be Valuable and perfect ; but if, thro' a Desire of-  
increasing that Quantity, more be drawn off, and so the latter-  
r acid Part he mix'd with the first Running, this spoiis the

Whole. We should here observe, by the way, that the -  
distill'd Waters of inodorous Plants, which have no aromatic.  
: Sharpness, may yet leave Very considerable Virtues, tho' the-  
.contrary is generally supposed : And again, that the .native-

Virtues of Vegetables may thus, in some measure, he chang’d ι’  
. hy the Boiling, from what they originally are. The Rose- ;  
mary remaining in our present Process still appears green, and .

. preserves its original Form ; heing only deprived of its native  
Smell and Taste. . . .. . t - .

“ ~ ...... t

*The common distilsd Water scy the Alembic, cohobated or return'd'  
. \* . bach npon more of the fresih Plant..*

The preceding Process has shew’d, what Water and Fire may  
separate from a Plant in close Veffeis, and whet is lest behind  
therein ; but the present Process teaches a Method of opening  
Plants still farther, and treating them so as to obtain distill’d  
Waters much richer in those Virtues of the Subject, which  
were mention'd in the former Process.

Take the Plant and Liquor, remaining in the Still after the  
preceding Process, and press, them strongly in a Strainer,  
that all the Decoction may he obtain'd, and with this mix  
all the Water hesore drawn civet. Return this Mixture into  
the Still, and add to it as much of the same recent Subject  
as was.employ'd before, and. If necessary; add likewise as  
much Water aS may make up the former Proportion to the  
Plant: Now close theVeflels exactly, and digest theWhole,  
with I 5o Degrees os Heat, for the Space of three Days and  
Nights, that the Herb, heing so long steep'd in its own Liquor,  
may he .open'd, loosen'd, and disposed the easier to part  
with its Virtues.. This Digestion being so long Continued,  
is of great Service ; hut if protracted too , long, introduces  
a Change tending to Putrefaction. . Let the Water now be  
distill'd off in the same manner as in the foregoing Process,  
only proceeding more cautioufly, and somewhat more flow-  
ly at the first ; because the Liquor in .the Still heing now  
thicker, more impregnated with the Plant, and therefore  
more flatulent, and apt to swell upon seeling the Fire, it '  
easily boils over; but aster about one half, of the expected  
Waterut come off, the Fire may . he prudentiy raised. If  
the Rule before laid down he observed, and the Distillation  
be continued so long as the first Water, describ'd in the pre-  
ceding Process, comes over, and then the Operation he im-  
mediately stopp’d, the Water so obtain'd will he whiter,  
thicker, more odorous, sapid, frothy, arid turbid, than  
that of the last Process.

This Water also preserves its Virtue much longer, find con-  
tains it in greater Perfection, than that of the last Process ;  
which shews us a way *of* concentrating the peculiar Virtue of  
Plants, so far aS it resides in their volatile odorous Parts: So  
likewise the remaining Decoction in this Process is much stronger  
than in the former ; and aS the Operation may be-repeated as  
often as one pleases, both the Water and the Decoction may;-  
by several Repetitions, at length be made extremely rich ; so  
that by this means excellent Medicines are procurable. Thus  
in the Year I730. I distill'd Baum after this manner fourteen  
times successively, and found the Water at last had a balsamic  
Taste, and the perfect Fragrance of the Plant, To as to prove  
highly refreshing, even when barely smelt to,, or tasted: And  
no Wonder, since the Virtue of many large Baskets of Baum  
was here concentrated, and brought within the Compass of a  
small Glass; and the Remainder also, at the Bottom of the Still,  
being inspissated, fill'd but another Glass, and proved gratefid,  
austere, and strengthening ; so that, by mixing the two toge-  
ther, the Virtues of the Plant might be thus highly concen-  
trated, or brought into a very littie room. This Process there-  
fore does not only afford excellent Waters, but admirable Ex-  
tracts also, which, when properly mix'd together, yield Medi-  
cines of such Efficacy as can scarce otherwise he imitated ; *for*the native Virtues of Vegetables are littie chang'd in this Ope-  
ration, certainly less than in others ; tho' it must be allow'd/  
that forne Alteration is produced by so long a Continuation of  
the Boiling : But both the Odour, Taste, and Effects, demon-  
strate, that the Waters thus prepar'd, retain, in an high De-  
gree, the specific Virtues of the Plant.

And hence it is certain, that the sought Medicinal Virtue of  
truly aromatic Vegetables resides in that Part of them which  
rises with the Heat of Boiling Water; and that it is possible, by  
Art, to concentrate their Virtues; so that they should prove  
much more effectual than in-the State they are naturally afford-  
ed : Nor is there any Limitation ; for by continuing to repeat  
the Operation, the Virtues os Plante may be thus exalted to  
any Degree the Artist should think proper; winch shews the  
extraordinary Power of Chyrnistry.

*Paracelsus* assures us he found, by Experience, that Baum is -  
possess'd os so great a specific Virtue, aS, by insinuating into  
she Humours of the Body, to restore a new youthful Vigour to  
the Aged, and by this means perfectly to cure the Gout; and  
*Isaac Hollandus* avouches the same. Now, if these Authors  
said true, I judged I might, by means os the present Procefs,  
procure the united Virtues of the Plant in their utmost Strength ;-  
and, indeed, I have in myself experienced extraordinary Effects  
of the Water so prepar’d, by taking it upon an empty Stomach.  
And, certainly,-it has scarce its Equal in Hypochondriacal and  
Hysterical Disorders, the Chlorosis, and Palpitation of the Heart,  
as often as these Diseases- proceed rather from a Disorder of the  
Spirits, than any Collection os morbific Matter; tho' it- is  
indeed expensive. I have reduced dried Mint, by three or sour  
Cohobations, into a balsamic penetrating Liquor, which becomes  
an incomparable and present Remedy for strengthening a weak  
Stomach, and curing Vomiting proceeding from a cold Viscous  
Phlegm lodg'd about the Mouth thereof; aS also in Li emeries.  
The Water I have in this manner prepar'd from Lemon-peel,  
has, by its-Fragrance, its agreeably penetrating, and highly,  
aromatic Taste and Virtue, immediately cured Flatulencies,  
DeliqniumS, FaintingS, and irregular Motions of rhe Heart,  
tho' taken in a Very small Dose. The like Water, prepar'd by  
repeated Cohobations from recent Wormwood, has successfully  
supplied the want Of Bile in the Body, stimulated all the languid

Vessels **that are assistant** informing the **Chyle, and kill'd and**expell'd Worms. The like Water, from the Leaves of SaVine,  
has given an almost incredible Motion to the whole nervous  
System, so as to prove the most, excellent of all Medicines, for  
promoting the Exclusion of the Foetus, and the Discharge of the  
Menses, and Haemorrhoids', τ The cohobated Water of Rue  
can never be sufficiently recommended for the Cure ofthe Fall-  
ing-sickness, rhe Hysteric Passion,’ for expelling Poison, and  
promoting of Sweat and Perspiration. Ido not here mention  
the Water I have made from the Berries of the Juniper-tree,  
and the Leaves os' the Arbor Vitae ; both of them successfully  
inuring the Dropsy, aS that from: Charnomile-flowers cures  
Tertian Agues. It were endless to pursue these Waters thro'  
all the Variety of Subjects. I judge it manifest upon the Whole,  
that this is a true and excellent Method of obtaining the Chy-  
Tnical distill'd Waters. Some Rules, however, are required for  
applying these two general Examples to all Sorts of Herbs, which  
may require something peculiar. These Rules are as follow:

I. Let' the aromatic, balsamic, oleaginous,' resmous, gum-  
mo-resinous, and strong-smelling Plants, which long retain their  
natural Fragrance, such aS Arbor Vitae, Baum, Bay, Hyssop,  
Juniper, Marjoram, Mint, Origanum, Penyroyal,. Rosemary,  
Sage, *etc.* be gently dried in littie in the Shade ; then digest  
them, with, the Quantity of Water already mentioned, sot  
twenty Hours, in a close Vessel, with I 50 Degrees of Heat,  
and afterwards distil in the Method above deliver'd, and thus  
alley will afford excellent Waters. '

*2.* When Waters are to be drawn from Barks, Roots,  
Seeds, and Woods, that are Very dense, ponderous, tough,  
and resmous ; let them he. digested for three, four, or more  
Weeks, with ninety-six Degrees of Heat, in’Vessels perfectly  
closed, with a proper Quantity of Salt and Water to open and  
prepare them better for Distillation : A considerable Quantity  
os Sea-salt is here added, partly to open the Subject the more,  
but chiefly to prevent Putrefaction, which otherwise would  
Certainly happen in so long4 Time, and with such a Heat, aS  
Is neceflary in this Case, and so destroy the Odour, Taste, and  
Virtues required: And thus, for Example, may Waters be  
prepared from Aloes, Box, Cedar, Guaiacum, Juniper, Rho-  
dium, and the like Woods. ’

3. Those Plants which diffusis their Odour to some Di-  
stance from them, and thus soon- lose it, should immediately he  
distill'd after being gather'd in a proper Season, without any  
previous Digestion ; thus Borage, Bugloss, Jessamin, white  
Lilies, Lilies .of the Valley, Roses, *etc.* are hurt by Heat, Di-  
gestion, and lyingmine Air. Some Woods also are injur'd in  
the same manner ; thus the‘Shavings of Sassafras, by being  
boiled in Water, soon lose their Virtue, Taste, and Smell.

4. The astringent, nutrimental, healing, consolidating,  
emollient, farinaceous, gelatinous, cooling, and styptic Vir-  
tues of Plants are never, by this means, communicated to the  
distill'd Waters, but are to be sought either in the whole  
Plant, or its most fix'd Part. Whence Pharmacy should he  
reliev'd from the unnecessary Trouble os preparing such Wa-  
lets; and, on the other hand. Physicians are diligently to be  
admonish’d to seek for such Virtues in the Infusions, Deco-  
ctions, and Extracts os such Plants. Would it not be ridicu-  
lous to expect any thing nutrimental in the indolent and Vapid  
distill’d Water of Barley, or minc'd Capon's Flesh ? Can any  
Man expect to find the excellent Virtues of Sorrel, in hot, lax,  
putrid, and bilious Constitutions, from the distill'd Water of  
this Plant ? So again it were absurd to attribute the inimitable  
Virtues of Plantain to its distill'd Water. Such idle and childish  
Trifles are therefore to he rejected in the serious Arts of Chy-  
Inistry and Medicine.

The Cose is far otherwise in those Plants, whose real Vis-  
rue entirely resides in that Part which is separable by a Heat not  
exceeding 214 Degrees; for theWaters carefully prepared from  
these will contain all the Virtue which is lost in their Deco-  
ctions and Extracts. ‘ The celebrated Virtues of LaVender-  
flowers, Lilies of the Valley, and of Rue, against that Species  
of the Falling-sickness winch proceeds from a Disturbance in  
- the Motion os the nervous Fluid, reside in the distill’d Water,  
but are absolutely wanting in the Decoctions or Extracts ; so,  
on the other hand, the anti-epileptic Virtue of Piony remains  
in the Decoction, but is wanting in the Water.

. 6. There are some Medicinal Plants whose Virtues reside in  
**a** Part which is Volatile, with the aforesaid Degree of Heat,  
but so, that after these are raised by Distillation, the remaining  
Plant, and its Decoction, continue possessed of other Virtues, of  
great Medicinal Efficacy. Such Decoctions, therefore, are not  
to be thrown away, but to he inspissated with a moderate Heat,  
that they may he kept uncorrupted ; for, being afterwards  
min’d with the diftiIl'd Water, the Virtues of both are thus  
united, and afford the whole Efficacy of the Plant : And of  
this kind are Chamomile, Carduus Benedictus, the lesser Cen-  
taury, Germander, Ground-pine, Mugwort, Rosemary, Sage,  
Scordium, Wormwood, *etc.* This Tribe of Herbs, indeed,  
are exalted by Fermentation, so as to afford the better Waters ;  
but when their Decoctions come afterwards to he inspissated.

*-they* **either have less. Or a different kind of Virtue froth the  
natural.**

- 7. Acid, bitter, austere, sweet, and flat Tastes, rarely as-  
tend from Plants in Distillation, but commonly remain in then  
.Extracts, the' they ascend from Chamomile, Wormwood,  
and a few more ; but the Colour of Plants is scarce over rais'd  
thy Distillation, tiro'we have a blue Colour in the Distillation  
of Chamomile, and a green one in that of Wormwood ; hut

. these Colours are rather in the Oil than in the Waters. The  
saponaceous Virtue, consisting in .the Union of the Salt and  
Oil, never rises, but remains in the Extracts; and therefore  
Plants endow'd with this Virtue are not to he thuS distill'd.

**. 8.** The following Vegetables scarce afford any thing of **Use**in their distill'd Waters ; that is, Barherry, Beet, common-  
Cherries, Colewort, Currans, Elder-berries, Endive, ripe  
Grapes, Ladies Mantie,. Lettice, the Juices of Citrons, Le-  
mons, Oranges, PurIlain,. Scorzonera, Sorrel, Strawherries,  
and Succory. There are also Very contrary Virtues in the  
same Plant : Thus the distill’d Water of Cinnamon, of the  
First Running, is deobstruens, heating, enlivening, stimulate-  
ing, and good in Vomiting; but that of the Second Running  
astringent, cooling, and nauseous ; whilst the Decoction re.t  
maining in the Still is of a dark-red Colour, opake, thick,  
of an austere Taste, astringent, coagulating, and strength-  
ening. . ...

- Simple Waters are directed by the College of Physicians **to**he drawn

. From the Leaves and Buds of

|  |  |
| --- | --- |
| Both the Wormwoods, | Baum,- |
| Angelica, | Mint,: |
| Carduus Benedictus, | Parriey, |
| Succory, « | Plantain, |
| .. The greater Celandine, | Penyroyal, |
| Eyebright, | Oak, ; |
| Fenil, | Rue, |
| Fumatory, | Saxifrage, |
| Hyssop, Marjoram, | Meadow-sweet\* |
| From the | Flowers of |
| Oranges, Chamomile, | Piony, Rosemary, |
| Beans, - ’ | White’s j , ) |
| Lilies of the Valleys | Red. *~ it* Roses. |
| Elder, | Damalk . 5 . |
| Red Poppies, Cowflips, | Limes. . . . |

. To these the *Edinburgh* Dispensatory adds

: Mngwort and SaVine.

The Tame Dispensatory-orders the **FROG-sPAwN WATER**to he made thus : . - \_

Hang any Quantity of FROG-SPAWN in a Bag, so that  
’ the Water may run from it into a Vessel set under-  
neath to receive it; and to every Pint of the Liquor, thus  
obtain'd, add a Dram of Roch-alum.

This is a much hetter Frog-spawn Water than we find or-  
der’d in other Dispensatories ; the Addition of the Alum, and  
the manner of Preparation by Resolution, considerably increase  
its Virtues ; whereas that obtain'd by bare Distillation gives  
ns little more of the Spawn than its useless Phlegm. AS it  
stands here, it seems design'd as a Cooler for external Uses.

The same Dispensatory Very properly observes, that the Wa-  
ters of those Plants which are obtainable to no good Purpose by  
Distillation, may he made by dissolving a proper Proportion  
of their essential Salt in Spring-water *(or rather in distill?d  
Water). \* \ , ...*

. The Method os making the **AQUA LAoTIS ALExITERIA,***Alexiterial Mtlk Water,* is specify^ under the Article ALEXI-  
**TERIA, which see. .**

**AQUA CINNAMOMI TENUIS,**

*Small Cinnamon-water,* is made by infusing twelve Ounces of  
Cinnamon in eight Pints of Water, and then distilling till the  
Liquor ceafes to come over milky.

Another Simple-water has lately been introduced into Pra-  
ctice, not mention'd in any Dispensatory that I know osa un-  
der the Name of **PEPPER-MINT WATER.** .This, I. presume.

|  |
| --- |
| From the Fruits of . |
| Citrons, the Peel, Green Walnuts; and |
| Rasp-herries, Black Cherries. ’ |
| , From twelve Pounds os the latter of which, bruised with the |
| Stones, draw one Gallon. |
| . From an Animal, |
| Frog's-fpawn. |
| *Quincy’s London Dispensatory.* |

**is distnPd from the MENTHA SpICLS BRElvIORISus ET ΒΑ.  
BITIORIBUS, FOLIIs MINTHA FUSCA, SAPORE FERVIDO  
PIPERIS of** *Rases Synopses* **; MENTHA SAXIFRAGA, AN—  
CUSTIORE EOLIO, SPICATA, SAPORE ACRI FERVIDO, of***Pluieners Almagest.* **I29. MENTHA PIPERATA ACUTA of***Petivers Herbariam Britannicum* **; Pepper-mint. . ’**

This Water is extremely nor in the Mouth, and upon the  
Stomach; and therefore seems proper to warm, invigorate, and  
diseussElaiulencies, to .dcstroy Acidities in the Stomach and  
Duodenum, and prevent Coagulations conferment thereto.

*Another Method of procuring a Worter from Vegetables, by for-  
. ynaentiag the Vegetable .before Distillation, after the manner of*Ludovicos.

; The Effects of Distillation, Digestion, and Cohobation,  
'heve sufficiently shewn us the Action of the Fire, limited by  
the Degree *of* bossing Water, in Distillation and Cohobation ,  
mid of a more gentle Firci with Water, by Digestion. We  
now proceed to exhibition elegant and useful Way of obtaining  
. Virtues of Plants very Tittle alter’d from what they naturally  
are, tbol render’d more penetrating and more volatile. -

I. Take recent Rofemary, cut and bruise it, if that seems  
-necessary ; put it into a large Oak Cask, leaving a Space  
empty at the Top, os four Inches deep ; then take as  
much Water as would, when added, fill the Cask to the  
same Height, including the Plant, and mix therein about  
an eighth Part of Honey, if it be cold Winter Weather ;  
or a twelfth Pari, if it be warm : in the Summer the like  
Quantity of coar.se; unrefined Sugar might, to the same  
Purpose, be added instead of the Honey, or helf an Ounce  
of Yeast added for each Pint of Water will have the fame  
Effect; but I prefer the Honey used as described ; Let the  
proper Quantity therefore of Honey and Water he warm-  
ed and poured upon the Plant in the Cask ; let the Cask  
stand upright, and have its wide, upper Orifice, or Bung-  
hole, loosely cover’d with a wooden Cover; then set it in  
a wooden Chest, to-he kept heated by means of a five  
Coal bury’d under sight Ashes, fo that the Liquor and  
Plant may feel a Heat of about eighty Degrees, which is  
afterwards to be constantly kept up, by covering the out-  
side with Clothe, and due Regulation of the Fire,  
which must therefore he greater and more carefully at-  
tended in cold Weather ; but in the Heat of Summer,  
little or no-Fire is requind. On the-iecond Day a hissing  
Noise will begin in the -Liquor, with Bubbles, Frothing,  
and a grateful Smell-of-Rofemary, the Plant now again  
. rising to the Surface : This Motion is called *Fermentarem.*

a. When this Fermentation has continu’d so long, thet  
what was on the Tophegins to subside-and sink to the  
Bottom, the Operation is continu’d long enough for our  
Purpose, so that now the Vessel must he cool’d, and clofely  
... bung’d down ; for if it should continue longer open in the  
same Warmth, the Spirit and Oil, now render’d more vot  
ladle, would fly off, and the Virtues requir’d he lost; fo  
that the Matter should be now directiy distill’d.

3. Take therefore as much of this Piant, and its fermented  
Liquor, as may fill Two-thiuls of a Sull, and worlc carefully  
from the first ; for the Liquor, containing much ferment-  
ing Spirit, easily rarefies with the Fire, froths, swells, and  
hence becomes very subjeci to boil over. \_ And as all. this  
'happens much quicker in this Distinction then in the sore-  
going Kinds, we ought here to work flower, especially  
at the first. ; - / . .

4. And thus there will come over first a limpid, uheinous,  
penetrating, odorous, rapid Liquor, all which is to be  
kept separate ; there follows a milky, opake, turbid Li-  
quor, still containing something of the fame Taste and-  
Odour; and at length comes one that is thin, acid, not  
fragrant, and scarce having any Property os the Rose-  
mary : There remains in the Still an Extracts indolent  
with respedi to the Rofemary, and retaining much of the  
Substance of Honey. And all these Particulars held,  
when the Fermentation is continued, till the Plant fpon-  
i tancoufly falls to the Bottom of the Cask, which, with  
the above-mentionin Degree of Heat, usually heppens in  
five or six Days.

3. This first. Water, or rather Spirit, may be kept for *seve-  
ral* Years, rn a close Vestel, without changing or growing  
ropy. It also excellently, retains the Taste and Odour of  
the Plant, tho’ a little alter’d ., hut if less Honey were  
added, less Heat employ’d, or the Fermentation continu'd  
only two or three Days ; then the distill'd Water of the  
first Running would he white, thick, opake, unituous,  
, frothy, and perfectly retain the Scent and Taste of the  
Plant, or much lefs alter’d than in the former Cafe ; the’

- the Water will not be so sharp and penetrating. After  
this is drawn off, a tartish, lmipid, inodorous Liquor;

' will rise, leaving a Remainder, behind, that retains much  
less of the Properties of.Rosemary, than in the preceding

Process. e.c. i. -i.ain

6. There is also in this Case always sound some Oil in the  
first Water, which was not in the former Spirit. Again,  
if the Fermentation were to continue only for a Day, or  
a Day and a half, the Water that first comes over would

' largely aheund with Oil. In other respects Matters are  
nearly the fame in both ; for it is constantly found, thet the  
longer the Fermentation was continu’d, the lest Oil appears '  
in the distill’d Water; and therefore what runs first, is al-  
ways clearer and stronger-;. butsipon mixing with common  
Water, the Whole immediately becomes milky; Whence \*  
these Waters greatly differ from one another, according as  
they are differently prepared in the above-mentiould respects.  
When the Fermentation is perfectiy performed, the first  
Water will he limpid, the second milky ; .and if a third **be**forced over by a strong-boiling Heat long'continu’d, it  
will prove acid, thin, and. limpid, refemblifigdistill’dVi-  
negar. The Extracl in this Cafe will always be the less  
impregnated with the Virtue of the Plant employ’d, the  
longer the Fermentation was continued, orthe more per-  
fectiy it was performed ; and *vice versa.* , The Oil alfo,  
- which in the Distillation of the unfermentedPlants floated  
upon the Surface of the Water, becomes so attenuated,  
when the Plant is persectiy fermented before Distillation,  
as entirely to disappear, add lie concealed; or is fubtllely di-  
vided in the distill’d Liquor, which may therefore be call’d  
. Spirit, rather than Water. That this is the Case, appears  
from hence, that if a large Quantity os Water be added  
to the Spirit, lt presently, grows white which shews  
thet there was Oil conceal’d in it: And frequently little  
Drops of Oil, thus regenerated, will float upon the Sut-  
sace of the Water. ..

R E M AR K S.

I. Hencewe learn, that this Fermentation (when perfectiy finished  
in the proper Time regain’d for thet Purpose, with a large  
Proportion of Ferment, and if the whole fermented Matter  
. he for fome nine contained olofely bung’d dowh in a Cask)  
affords these Waters extremely limpid, hot, .aromanc, odo-  
rous, sapid, and penetrating, without any Sigh of their con-  
mining an Oil ; and according as thefe Propertles appear  
more in the Water, the native virtues of **the** Plant are more  
changed j so thet at last they can searce be known : But  
when the Fermentation is perfeci, each losing; its proper  
Character, they all hecome nearly alike: Whence it is main-  
fest, that the particular Virtues of Vegetables are not exalted .  
or perfecied by Fermentation, as they were in the preceding  
Process by repeated Cohobation; and that the Waters of **the**prefent Process, by such Cohobation, are not rendered so fpm-  
tuous, as by a single Fermentation. And this seerns to proceed  
from hence, thet in the long contioued and active Motion of  
Fermentation, the volatile presiding Spirit, now freed from the  
open’d Parts of the Plant, but principally from the attenu-  
ated Oil, exhales ; for the Tenacity of the Oil was the  
chief thing that detained and locked the Spirit in the Plans.  
But a gentle and moderate Fermentation, which does not  
dissipate the Spirit, only dissolves the viseous Obstacles, ad-  
mirably quickens there Waters, makes them durable, or  
long preserves them from Corruption, Dregginess and Ropi-  
ness ; as is excellently observed by thet skilful and candid  
Chymist, *Daniel Ludevicus,* in his Dispensatory accommo-  
dated to the prefent Age. And thus the Water of Carduus  
Benedictirs, so prepared, is highly commended, where  
Sweating and Perspiration are required.

2. Hence the Taste and Smell of Plants, communicated **to**their distill’d Waters, principally depend upon their native  
Spirit respectively. But as this "Spirit is wrapped up in a te-  
nacious Oil, when this Oil is mixed with the Waters, it ren-  
ders them the more odorous and sapid in the larger Quantity  
it is fo mixed. This Oil is gradually thinned, made less te-  
nacious, more spirituous, and easier to mix with Water, by  
Distillation, Digestion, and Cohobation in close Vessels; but  
thus the Spirit also becomes more volatile and disentangled,  
so as easily to fly off, unless it is every way very closely  
consined in the Vessels during the Distillation ; which being-  
performed, highly efficacious Waters may he thus prepared.  
But as Fermentation requires a Length of Time, the Ad-  
mission of **the** Air, and open Veffeis, it attenuates Oils by

’ its Monon, so as to mix them with Water, and in this  
Form make an inflammable Liquor ; which cannot happen  
without a Dissipation of the native Spirin It however-renders  
Oris miscible with the animal Juices, and fit to enter the  
finest Vessels; but always destroys the peculiar Virtue of the  
Plane. In the mean time, it proves the Medium of con-  
veying stimulating and grateful Virtues to the Nerves, espe-  
cially those of the Nose, Mouth, Jaws, Throat, Stomach,  
and Intestines. - - - .

- Tfrarfiothing relating-to the Distillation Of Waters may-he  
omitted, I shall add the Method of distilling jdur *Descensum. .....*

Chymists formerly called that Motion orBodies Distillation,'  
whei.., thv the Assistance, of (Fire,- -the; Subject to he changed,  
and contained in one Vestel, to which the Fire was apply'd,  
pastes .into, another joined thereto, 'whether -Solids were thus  
teeated-or Fluids; nddsthin^Operation with them .differ’d in  
three-respects': For, I.; The Tire rahed .the Matter perpen-  
dictfiariy upwards. ' 2. Somewhat obliquely, or laterally, as in  
Distillafion.-by the Retort. .And, 3. Linteo wards, the Tire  
being, applyldralIove .whichclast..Specie?, os. Distillation they  
called *per Doscensurn,* which they used in the last Age for sepa-  
ruricgCininksilvess front site -Ore, and which *Paracelsus* from  
thence transferred. to Vegetables, Of thia kind, os .Distillation  
we are now to give an Example.

Let .there be. procured a. jlufliniently. wide and) deep cylindrical  
Vessel, made of such Matter as will neither transmit, drink  
' up, or foul Liquors.. From 'the upper Rim of this Veffel cut  
an Inside proove, fit to/echine exactly^ and sustain a round  
Plate struck sell of Hines,: which: is to sink imp the open Mouth  
ofthe Vessel, so far-that.:the; upper Surface of the Plate he two  
Inches from the Rim thereof ; then place any recent, green,  
succulent Plant, first cut or bruised, upon the Plate, so that  
it may-reach up: to theRim j'Then apply. 4. fiat-Cover, which  
fnayoxactlyxlose the Mouth of the Vessel,, with the Assistance  
oflutirtg, to prevent any Vapours from exhaling. The whole  
Apparatus' may he made of Iron-plate,-if a large Quantity os  
Water is requir'd at once T otherwise, for a dnglo Experiment,  
one of Earth may suffice. Let a littie fine Ashes be sifted upon  
theCovesp'jind a sew ,llVe“Coals he placed thereon, that the  
moist Parts os the Plant, may he resolved Into Vapour, and its  
ς. Juices.be liquefied so aS to fall into the wide Part os the Vestel  
below, whereheing condensed.by the Cold, they will gradu-  
ally distil and collect, if the Fire he prudently managed, and  
increased by Degrees. ... -Andi-thus the .Spirit,, Water,;-Wax,  
Gum, Oil, Rosin, aS also the. saline and saponaceous Matter  
of the Vegetable, which do not easily rise in the preceding  
Distillations, may be. obtained-.: -Care, heweverymost be had, not  
to make the Fire too large, for sear of quite burning up the Parts  
of the Subject; tho’, indeed, a small Degree will have hut  
little Effect; hut if a violent Fire he ufed,rall the Parts will'he  
confounded .together, the oily. Matter burnt up, the Smell and  
Taste of the Produce become To empyreumatical, smoky, bit-  
ter, and nauseous, aS to he scarce fit for internal.Use, especially  
is the Subject were dry and unctuous. But when succulent  
Vegetables are employ’d, .such aS Rose-ilowers, and prudently  
treated without burning; the Water so prepared will nearly  
resemble the natural Juices, aS containing both their sapona-  
ceous Nature, and peculiar Virtues, though always a little  
changed by the Fine ; whence, the expressed. Juices themselves  
are not only more agreeable, but more medicinal. *' Paracelsus,*however, by treating Guaiacum in this manner, obtained an  
acid Liquor, and a sharp foetid Oil, which he recommends  
heth for external and internal .Uses ; whence this Operation  
has heen for some time practised in *Germany, .soit* is now al-  
most disused, or changed for others more suitable. *Boerhaauds  
Chymistry. ’ ' ;*

*Spirituous and Compound* **WATERS** *directed by the* **COLLEGE***‘ of* **PHYSICIANS.** ,:„ψ.. .ι

For preparing these, the Herbs are to be chosen green, unless  
particularly ordered to the contrary : In Defect .of those which  
are green, about a fourth Part of the dry may be substituted,  
and so much Spring-water is to be allowed as will prevent their  
burning to the StilL .c ἐν . . . . ἄκ

**AQUA ABSINTHII MINUS COMPOSITA-;** Os, *The Lesser  
Composition of Wormwood Water.* 'gi..:: -. . χ.

Take of the Leaves os dried Wormwood, two Pounds ; os  
the Lester Cardamom-seeds, two Ounces; of Coriander-  
seeds, half a Pound. Infuse them all in four Gallons os  
*French* Brandy, and draw off the same Quantity by Distil-  
lation. ’ . : .... - .4.

After the same manner, hut with an Omission of these Seeds,  
and, for that Reason, an Augmentation of four times the Quan-  
tity of Herbs, are made Waters from the whole Plants of An-  
gelica, Baum, Mint, Sage, *etc:* the Flowers of Rosemary,  
Seeds of Caraway, Lesser Cardamoms, Anise, Juniper-berries,  
Orange, Citron, and Lemon-peel, *etc.*

This Water differs chiefly fromchat of the former Djinen-  
Iatory, by substituting Cardamom and Coriander-seeds in room  
of the Aniseeds, which makes it more cordial and grateful to  
the Stomach; the Aniseeds yielding too foul an Oil to suit it  
for fuch Purposes. This Water is commonly used in Stomachic  
Infusions, on a Supposition, that it claims a Right to such Vir-  
tues from the Wormwood ; but the Water fifing from it par-  
takes not of these Qualities which belong, to it .in Tincture ;

so that it -seems only to he carminative from she Spice and Seeds  
now ordered in\* *' ~fs.sisinceyso : ' 'si.'- "*

**. AQUA -ABSINTHII MAGIS COMPOSITA; Or,** *The greater  
Composition of Wormwood' Water;"" '' .*

*Take os* the Sea, and common Wormwood dried, .each one  
si- Pound of Sage, Mint, and'Baum dried, each two Hand-  
ss stiis ; of the Roots of Galangais, Ginger,: Calamus’ Aro-  
rnatieussand Elecampane, os the Seeds of Sweet Fenil and  
Coriander, each three Drams ; Cinnamon, Cloves, and  
.. . , Nutmegs,..each, two jDrams; of the Lesser Cardamoms

-and Cubebs, 'each one Dram cot and bruise the Ingredi-  
ents as they require ; and, after infusing them for some

\_ - - time in-twelve Pints *us French* Brandy, draw sus the same  
"Quantityby Distillation. ’\* " - y : --

rThis. differs -from that of the former Dispensatory, in reject-  
ingDiquorice-root and Raisins, which can have no Effect in  
Distillation;' andssn" allowingζ a- greater Proportion of Spirit,  
and more to he drawn off; the former being too much loaded  
with the oily Ingredients, to admit either of ItS being fine to  
the Eye, or'gratesul-To the Steinach; *squ incests Dis.p.*

*suit* we .consider the Wormwood and Gentian. Waters, as  
Stomachics, little can be expected from them .; because the  
Materials .they are drawn from; ’are not suited to send anything  
over by Distillation, ' that comes within this intention ; so that  
if there he any thing good in them, we are more beholden to  
the Spirit than the other Ingredients'sor'it. ' *squinesis Preelect.  
Pharnaceta.”’*  ' .T.ss" ' ' .

' The *Aqna Alismthii, isid^Angelicae'magis Composita,* are suf-  
ficiently uniform in *their* Intentions, but have too many of the  
bily Seeds to allow them to doine over fine, especially the latter;  
bin neither of them is much prescribed or made. *Idem.*

**AQUA AspoELIhAE MAGIsCOMPOSITA:** *Cor, The greater  
Composition ofAngelica Watcr. A . "A ‘ ' .' ...;*

Take of Angelica-root, and the Leaves of: Carduus, each  
six\* Ounces;\* of Baum and *-Sage,'* each four Ounces; of  
Angelica-seeds, fix: Ounces;' and of Sweet Fenil-seeds,  
nine Ounces. Let the dried Herbs and Seeds be grofly

v.uv.. bruised ; and to them add of- Cinnamon, two'Drams ; of  
Cloves and Mace, each one Dram and an half; of Nut-  
megs, and the Lesser Cardamom-feeds, each one Dram ;

c\*” .of Cubebs, -and Galangal-root, each one Dram and an  
ior half; of *Jamaica* Pepper and Saffron, each one Dram. ν.: "πέ Infuse them in two Gallons of *French* Brandy, and draw

off as much by Distillation. . ..

'. This hath rejected the *Species Diarnoschu Dulcis,* and the  
*Aromaticum Roscturn,* which were in the former; one os these  
Compositions being wholly expunged in the present Dispensa-  
lory, and in their room are added Spices more conveniently '  
answering the’same Intentions. But in this, the Carduus avails  
-nothing; and the Sweet Fennel-seeds are in too great-a Quan-  
tity, which will make the Water foul and milky. The last  
Runnings of all the foregoing Waters are worth keeping sepa-  
rate for carminative Juleps, and such-like Intentions, *oscines.t  
Dis.pons.at.* **S - —os - -**

e--.,\*-'. . *..... l... .... - ” ' ‘ .*

**- A^pA BR.yONiAE COMPosiTA: Or,** *Compound Bryony  
Waior.* **tst...:. ..so;: . ... ' .**

7 'Take of the Juice *os* Bryony-roots, four Pints; of the Juice  
jt poof Rue and Mugwort, each two Pints; of the Leaves

of SaVine, three Handsuis ; Motherwort, Catmint, and  
Penyroyal, each two Handsuis; of Basil and Dittany,  
z each one Handful and an half; of fresh outer Peel of  
’ Oranges, four Ounces; of Myrrh, two Ounces ; of *Russia*

Castor, one Ounce; Spirit os Wine, eight Pints. Distil  
as usual after proper Maceration ; for the longer things of  
.o . this Kind infuse together, the better is the Water.

: This is much preserihed in Hysterical Cafes, and is Very  
forcing upon the Uterus, which makes it given to promote Deli-  
very, and forward the proper Cleansings afterwards; aS also to  
open Menstrual Obstructions, and abundance os Female Com-  
plaints. It is likewise good against Convulsions in Children,  
and of Service in *ussy* nervous Coinplaint in either Sex. Its  
Dose is from two Drams to two Ounces, with any conveni-  
ent Dilutes. *spuincsis Dispenset. . .*

; The *Aqua Bryonia Composita* takes in some of the most  
efficacious of tho foetid Simples, and seems admirably wall  
Contrived for the intention of an Hysteric, so far as their Vir-  
tues are procurable this way ; hut they who would have it good, ‘  
must expect it Very foul and milky.; for where it is otherwise.  
It heth been defrauded of itS due Quantity of the best Ingredi-  
ents, or their better Parts have been precipitated with Alum, or  
taken out by the Filtre. *^uinc^s Pralect. Pharmac.*

**AQUA FLORUM CHAMEMELi COMPOSITA: Gr,** *Cam.  
pound Chamomile-finijer Water.*

Take of dried Chamomile-flowers, one Pound; of the outer  
Peel of Oranges, two Ounces ; of the Leaves of common  
Wormwood and Penyroyal, each two Handfuls., of **the**Seeds of Anise, Cumin and Sweet Fennel, of the Berries  
of Bay, and Juniper, each one Ounce; infuse them in  
One Gallon of *French* Brandy, and draw off double that  
Quantity by Distillation. - ...

This Water is a Carminative, and in that Intention may he  
used at Discretion. *Quincy.*

**AquA CINNAMoMt FoRTrs : Or,** *Strang Cinnamon Wa-  
ter. ’ '*

Take one Pound of Cinnamon groily powdered, and one  
Gallon of *French* Brandy; draw off by Distillation ten  
so Pints. ; - - - ss

**A QUA EPIDEMICA f Or,** *Plague Water.*

Take of the Leaves of Celandine, Rosemary, Rhe, Sage,  
*Roman* Wormwood, Dragon, Agrimony, Baum, Scor-  
di urn, the Lesser Centaury, Carduus, Betony, and Mint,  
each two Handfuls; of dried Angelica-root, Zedoary,  
and Gentian, each one Ounce; of the *Virginia* Snake-  
root, half an Ounce; let them be infofedin one Gallon  
Of *French* Brandy, and draw off tenPints by Distillation.

This very much differs from that of the old Dispensatory ;  
and, besides the Addition of many new Herbs, leaves out **the**Masterwort, Pinny, and Butterbur-roots, insomuch that the  
Intention of the Medicine seems changed from an Alexipharmic  
into a Cardiac. It is taken from ShsptanS Additions to the former  
Dispensatory; and is not, by many, so much esteemed as the  
former Plague Water, several Ingredients of most Efficacy there  
heing here neglected, and many in this either useless or foreign  
to the intentions. *Quincy’s Dispensat. - : -*

**AQtrA GENTIAN**je **CoMposiTA : Or,** *Compound Gentian  
Water. .*

Take Gentian sliced, one Pound and. an half; of the Leaves  
and Flowers of the Lesser Centaury, each four Ounces ;  
infuse them in six Pints of *French* Brandy, and distil about  
half that Quantity. .

This Water is frequently prescribed as a Stomachic, and is  
' commended for a Deterges, and is said to do Service in Drop-  
sies, the Jaundice, and any Obstructions os the Viscera ; and  
is given from two Drams to two Dr three Ounces at a Dose :  
But, in Truth, these Ingredients give fo little that will rise in  
Vapour, that the Spirit comes over but with a very fmall Al-  
teration; so that they who are fond of the Virtues as they  
stand recommended in those Ingredients, must look for them in  
the Extracti, or never put them into the Still ; and that is easily  
made by straining and evaporating the Residuum, and is much  
ofed in the Shops, chiefly with Stomachics and Deobstruents,  
when prescribed to be made, in Pilis. *Salmon,* in his Notes up-  
on this Water, says, it is a Preservative in pestilential Seasons,  
excellent against the Rickets, helps Stitches in the Side, and  
provokes the Terms and After-birth j and, with equal Reason  
and Consistency, that wretched Scribbler might have said it cured  
Corns, broken Bones, and Apoplexies. *Qyincses Dispense*

Aqua **IMFEaIALIs i Or,** *Imperial Woter.* **j**

Take of dried Citron Peels, Of Nutmegs, Cloves, and Cin-  
namon, each two Ounces ; Roots of Cyperus, *Florentine*Oriis, and Calamus 'Aromaticus, each one Ounce, of  
lZedoary, Galangal, and Ginger, each bass an Ounce;  
of the Tops of Lavender and Rosemary, each two Hand-  
fuls; of the Leaves of Bay, Marjoram, Baum, Mint,  
Sage, and Thyme, each one Handful; of the Flowers of  
white and red Roses, each half an Handful; Damask  
Rofe.water, four Pints , of *French* Brandy, one Gallon ;  
then distil off ten Pints.

: This is a very good cephalic Water, and makes a very con-  
venienti Julep in any nervous Cases whatsoever , and though it  
is fo much flighted in the present Practice,' this may he raid of  
It, which can he raid of few hefides in the Dispensatory, that  
all the Ingredients coincide in one intention, and Inch as will  
part with their Virtues by Distillation. It may be given from  
two Drams to two Ounces in any convenient Vehicle; it is also  
a pleasant Cordial Dram alone, and very good upon any fudden  
Sickness of the Stomach. *Quincy’s Dispensuri*

**AQtrA LACTIS ALEXITERIA; Or,** *Alexiturial Milk TVa.  
ter.* **See ALEXITERIA.**

AQtrA **LIMACUM TENUIS: Or,** *A fmall Snail Water.*

Take of the Leaves of Baum, Mint, Harts-tongue, and  
Ground-ivy, of the Flowers of Archangel, Mallows, and  
Elder, each one Handful; - os Snails washed, and the  
White of Eggs, each four Ounces; of Nutmegs, bass an  
Ounce; and of Cow’s Milk, one Gallon ; distil accord-  
ing to Art, either in Balneo Marise, or in a Sand-heat.

If this be drawn with six Pints of Cow’S Milk, and two  
Pints of Canary, it is styled *Thestronger Snail Water.*

**AQUA MIRABILIS. Or,** *The vjcrndersul Water.*

. Take of Cloves, Galangais, Cubebs, Mace, the Lesser Car-  
damoms. Nutmegs and Ginger, each eno Dram; Juice of  
the Greater Celandine, half a Pint*French* Brandy, two  
stilla an^ 311 draw off the fame Quantity by Di-

This is a pleasant and good Cordial, and greatly breaks the  
Wind off the Stomach, and disperses Flatulencies. *Quincses  
Dispensat. \_ - .*

*ksivA.* Nephritica: **Or,** *A Water agaiast the Stone.*

Take of the best Flowers of White-thorn, sour Pounds;

of Nutmegs bruised,-three Ounces; insure them together  
in a close Vessel with two Gallons of generous White- ..  
wine, and draw off by Distillation twelve Pints.

*γ* This was much prescribed by the late DI. *Badeliffie,* but was  
not in the former Dispensatory.

**A on A PAONIA CoMposiTA : Or,** *Compound Plumy Wot-  
ter. ........*

- Take Lily of the Valley Flowers fresh gathered, one Pound;  
.and infuse them in two Gallons and an half of *French*si Brandy; and to the fame put of Lime-flowers, bass **a**

Pound; of Piony, four Ounces; of the Male Piony-root,  
two Ounces and an bass; white Dittany, and long Birth-  
wort, of each half an Ounce; of Misteto of the Oak,  
and Rue, each two Handfuis ; of Pinny-seeds husk’d, ten  
Drams; and of the Sceds of Rue, three Dramsand an  
- half; of *Rustle* Castor, Cubebs, and Mace, each two  
i - Drams2.of Cinnamon, an Ounce and an half; of Rose-

V mary-stowers, six Pugils, of Stcechas, and Lavender-  
flowers, -each sour Pugils ; of Betony, Clove, and Cow-,  
flip-flowers, each eight Pugils; of the Juice of black-  
Cherries, four Pints; and from the Whole draw off hy  
\*- Distillation fout Gallons.

The present College Dispensatory hath lest out some of **the**insignificant ingredients that were in the former, and particu-  
larly the Squills; and avoided also the Trouble of.a double  
Distillation, which was altogether needlefs. This is the fame  
- as was originally inserted by the College in their fust Dispensa-  
tory, under the Title of *Aqua Antiepileptica Langii.* The  
Quantities also of some of the Ingredients are blameable, as  
three Drams and an half ofSceds of Rue, when the Whole might  
he taken in Substance at one Dose, without any visible Effects  
It has some Ingredients in it of little or no Efficacy to **the**mam Purpose, and others entirely unfit sot this Form; of the  
first are the Radix Dictsmni Albi, and Aristolochiae Longz,  
neither of which will send, any thing considerable over the  
Helm. The Semina Pseonhe, and Vsscus Quercinus likewise,  
howsoever agreeable they may be to this intention in other  
Forms, will not send out any thing of that Kind by Distilla-  
tion. The Sceds will make well enough into an Emulsion  
when busk’d, and the Misteto is best reduced into a Powder;  
but busking the Seeds to be distill’d, were they proper for it, is  
a Circumstance very trifling. The Castor is in this increased  
in its Quantity to whet it was hefore, but although in may ba  
the most considerable Ingredient in the Whole for the. main in-  
tention, yet the more it fends over the Helm, the more will it  
deform the Water with a Milkinest, and disagreeable Scent ;  
and therefore ’tis much hetter connived into other Forms, tho’  
in the Quantity it now stands here, it is too little to do much  
Harm in this refpeS; so that this Water, in the main, is plea-  
sant enough, and now obtains in common Prescription beyond  
any of the fame Rank. *Qpirusts Pralect. Phartnac.*

-It is an excellent Cordial, and can he exceeded by nothing  
in all nervous Cases, both in Children and grown Perrons. It  
may be diluted into a Julep with Black-cherty Water, or any  
such Vehicle, and may be given from one Dram to three, to  
Children, and from half an Ounce to two Ounces to grown

The new Dispensatory omits the needless Circumstance in  
the former, of depurating the Lemon-juice hefore Distillation,  
and Very prudently adds the distill’d Vinegar afterwards, instead  
of putting it into the Still, because with fuch Management it  
effectually answers all its Intentions, and risques less Hazard of  
carrying along with the Medicine any Part of the Metal with  
which the Alembic is made, as all Acids are subject to do. This ..  
Water is the most used of any in the Shops, though its Compo-  
sition be blamed by many; for the Juices can contribute very  
littie to its Virtues.; and upon account of the proper Season to  
obtain them, this Water cannot be made at all times, how  
much soever wanted ; unless, as some do, the Juices are *ex-  
press’d* in their Season, and kept on Purpose; but then they  
are good for nothing; for so little as is os a Volatile Nature in  
these Simples, will very soon be lost. The rest os the Ingredi-  
ents indeed agree Very well to the main Intention of an Alexi-  
pharmic and Sudorific ; and the Acids contribute much to that  
Purpose.

The Dose of this Water is usually to grown Persons from  
half an Ounce to one Ounce, which is too little; fur four  
Ounces is but a moderate Quantity to have any Reliance upon,  
especially to Persons who are used to high living, *Asuincsse  
Difpenfat.*

Et is of great importance in Composition to adapt the ingre-  
dients made use *of* to Forms in'which their Medicinal Virtues  
may he procured and preserved. But nothing is more idle than  
to study the Elegance and Beauty of Medicines, because they  
are not calculated to please the Eye or Palate, but to cure  
Distempers. Besides; all our Endeavours to render Remedies  
palatable are fruitiest, because the Very Name of a Medicine,  
with most People, conveys an Idea of something nauseous.

As to the Form of Spirituous Waters, they do not seem in  
the least calculated for the Removal of any Distemper, though  
they may somtimes relieve Symptoms. If what has been said  
under the Article ALCOHOL, with respect to Spirits procured  
by Fermentation, be duly considered, perhaps others will, like  
me, think, that spirituous Waters can seldom be taken in  
Quantities sufficient to do any considerable Service by the In-  
gredients wherewith they are impregnated, without doing a Mis-  
chief more than equivalent by their noxious Spirit.

. In several of the Compound Waters mentioned above, much  
more is directed to be drawn off, than is put of the Spirit to  
the Ingredients, in these Cases therefore, the Compounder  
must take care to put into the Still Water sufficient to admit of  
the Quantities directed to. he drawn off\*

Because there are many of. the foreign Writers in Physic,  
who make mention of the *Aqua Anhahina,* and of the *Aqua  
Sclopetaria,* which last is usually known by the Name of *Eau  
d'Arquebufade,* I shall in this Place specify the Manner of them  
Preparation. And to these I shall'add a Snail Water, somewhat  
different from that of the College, on account of its fingular  
Excellence, *A. . -:*

**AQUA ANHALTINA.**

χ Take of the heft Turpentine, half a Pound; of Olibanum,  
one Ounce; Wood of Aloes reduced to Powder, three  
Drams ; Grains of Mastich, CloVe-gilly-flowers, or Rose-  
mary-flowers. Nutmegs, Cuhebs, or Galangals, Cinnamon,  
a . each six Drams; Saffron two Drams and an half; Fennel-  
. /..-feeds, and Bay-berries, each half a Dram. Reduce all to  
a Powder, and digest in five Pounds of Spirit of Wine for.  
fix Days, adding fifteen Grains of Musk tied up in a littie  
Bag. Then distil in a stow *Balneum Maria ,* separatc.

**f . whet is clear from whet is turbid.**

**ru** *N. B.* **'Tis better to put the Mush in the Beak Of the  
IAlembin. . Ἀ -:**

’. This Water warms, dries, discusses, strengthens the Heart,  
.Stomach, and other Viscera; for this.Reason it is thought good  
.in Paintings and Deliquiums. But it is more frequently used  
externally, and said to he of great Service in Catarrhs, and Pains  
inifing.from a.cold Cause, in the Wandering Gout, aS 'tis call'd,  
in Palsies, Epilepsies, Apoplexies, Vertigo?, Tremors, and Le-  
thargies, by rubbing the affected Part well with it. *Scheoderi  
’.Pharmacapoeia Medico'chymica. ; .*

-in.AQtjA **SCLOPETARIA,***sme* **VULNERARIA :** *The Vulnerary'  
. Water,* **commonly call'd** *Eau AA.rquebufade.*

Take of the Leaves and Roots of Comfrey, of the Leaves  
. of Sage, of Mugwort, and of Bugle, each four Handfuls;  
i. . of the LeaVes of Betony,. Sanicle, Οχ-bye, of Daisy, of  
the greater Figwort, of Plantain, os Agrimony, Vervain,  
.Wormwood, and Fennel, each two Handfuls; of St.  
John's-wort, of long Birthwort, of Orpine, of Paul's

. . Betony, of the lesser Centaury, os Yarrow, of Tobacco,  
of Mouse-ear, of Minr, 2nd ofHyffop, each one Hand-  
..— ful: Cut. all these, and bruise them svfficientiy ina Mor-

Persons ; and, if the Case requires it, may he repeated every  
fix or eight Hours. But Cases of Moment are not trusted to  
such Helps aS this alone, *Asuincefoe Difpenfat.*

**AQUA PROTHERIAcALIS : Or,** *A Succedaneum for the .  
Treacle Water.*

Take of the Leaves of Scordium, Scabious, Carduus, and .  
GoatS-rue, each two Handfuls ; of Citron-peel, and  
Orange-peel dried, each half an Ounce; Seeds of Ci-  
trons, Hartwort, and Treacle-mustard, each one Ounce ;  
of the Flowers of Marigolds and Rosemary, each one  
Handful; Cinnamon, two Drams; of *French* Brandy,  
two Pints; and distil off six Pints.

The Carduus Seeds, and the Carduus Water, are in this,  
omitted aS insignificant, the rest continuing much as before.  
It is designed to be used as Treacle Water when that proves de-  
ficient, in a Season not fit to make it. *Nuincey. ..*

**AQUA.RAPHANr COMposITA: Or,** *CompoundHorfe-radijh  
Waler.*

Take of the Leaves of both Scurvy-graffes, fresh gathered in.  
the Spring, each six Pounds ; bruise them,, and press out  
the Juice; and to it- add the Juices of Brook-lime and  
Water-cresses, each one Pint and an half; of Horso-  
Iadish-root, two Pounds; os Arum-root, fresh, six Ounces;  
**of**Winter'S-bark, and Nutmegs, each sour Ounces; os  
Lemon-peeis dried, two Ounces ; \of *French* Brandy, .four  
Pints ; and draw off by Distillation eight Pints.

- In this is rejected the Briony-root, which is ordered in a large  
Quantity in the old College Dispensatory, but renders the  
Flavour of the Water nauseous, and gives no Virtues suitable  
to the main intention of the Whole. The Arum-root is like-  
wise in this increased in its Quantity, but half an Ounce, br-  
ing ordered in the former, whereby the Medicine is rendered  
yet more pungent, and essicacious as an Antiscorbutic, or a  
Nephritic, both which Purposes 'tis calculated for. All the  
Ingredients in this Water, are of. a subtie penetrating Nature,  
and greatly abound with Volatile Salts, which, in many gross and  
stay Constitutions of the Blood, do great Service by dividing it,  
and rendering it more fluid, which will increase-the Discharges  
by the Kidneys, and likewise wash through any Obstructions  
in those Parts. In all Obstructions of the other *Vis.ccra,* it is  
also an excellent Medicine, and prevaiis against the Jaundice,  
Cachexies, and Dropsies ; and, in scorbutic Cases, there is  
nothing beyond it ; as it greatly forces those minute Passages,  
promotes Transpiration, and cleanses the Skin, and other small  
Glands, which entertain gross Particles to the Detriment of  
their proper Offices. It may be given from half an Ounce to  
three or sour Ounces, unless immediately after Distillation, be-  
cause then it is so pungent as makes it difficult to take without  
much diluting. This Water ought to be drawn with the Re-  
ceiver fixed close to the Worm by a Bladder, otherwise a great  
deal of the best Part will fly away, *quinces.s Difpenfat.*

The *Aqua Raphani Composita* aims at the Intention of a  
Diuretic ; and will, if good, be as foul and milky aS the com-  
.pound Bryony Water, when rightly prepared, *squincsis Pra~  
lect. Pharmac. :..* ι

AQUA DOCTORIS STEPHANI: Or, *Doctor* Stephen’s *Wa-  
ter. ‘ . .ss su ........*

Take of Cinnamon, Ginger, Galangals, Cloves, Nutmegs,  
Grains of Paradise, Of the Seeds of Anise, Sweet Fennel,  
and Caraway, each one Dram; of the Leaves of Thyme,  
Mother Of Thyme, Mint, Sage, Penyroyal, Rosemary,  
Flowers of red Roses, Chainomile, Origanum, and La-  
vender, each one Handfill ; of *French* Brandy, fix Pints.;  
and draw off one Gallon by Distillation.

' All the Ingredients in this Water are well suited to the inain  
Intention of a Cephalic, a Cordial, or Carmi native; tris like-

. wife somewhat Antihysterical, and therefore frequently used’by  
the Midwives amongst inch Women. It is much prescribed

**\* from two Drams to two Ounces. ... -.**

**. AQUA THERiAcALIs :** *Or, Treacle Witter.*

Take of the Juice of green Walnuts, four Pints ; of **the**-Juice of Rue, three Pints ; of Cardims and Baum, each  
two Pints; of the fresh gather'd Butterbur-roots, one  
Pound and an half - of Burdock, one Pound ; of Ange-  
lica, and Masterwort, each half a Pound ;:.of green Scor-  
dium, four Handfuls; of old *Fenice* Treacle, and Mi-  
thndate, each eight Ounces; of Lemon-juice, two Pints ;  
os *French* Brandy, one Gallon and. an half; drawoff by  
Distillation three Gallons and an half,.. and then add sour  
Pints of .distill'd. Vinegar. .. : . .: .

tar; then put them into a large Earthen Vestel, and pour  
twenty Pounds of White-wine upon them. Stir the  
Whole with a Stick, stop the Vessel, and allow it to di-  
gest in a warm Dung-hill, or any other such Heat, for **the**Space of three Days. Then pour it over into a large Cop-  
per Cucurbit, whose Inside is covered with Tin ; and,  
having adapted its Head and Refrigeratory to it, draw off  
the Moisture into a Receiver, by a moderate Fire, in the  
- ordinary manner. Thus you will have the Vuinerary

Water, or *Eau A Arquebusude,* which must he preserved  
in a close.stopt Bottle.

It is good for Contusions, and Dislocations, and very proper  
sor discussing Tumors ; apply'd externally, it deterges Wounds,  
and old Ulcers. It incarns, corroborates, resists Putresaction,  
stops Gangrenes, and is by some used against Vapours.

That the Nature, the Uses, and Virtues of .this Water may  
be the better understood, I shall subjoin a short Account of the  
Qualities of each of its Ingredients.

As for the Water itself, its very Names are expressive of its  
Virtues ; for the Word *Vulnerary* imports its being proper for  
curing Wounds. And the *French sN*ord *Arquebusude* implies  
its being particularly proper in Gun-shot Wounds.

**I. COMFREY then,** or the *greater Confound,* is glutinous,  
and proper to consolidate the Lips of Wounds hence it receives  
its *Latin* Name CONsoLiDA. It stops Haemorrhages and.  
Fluxes, and contains littie Salt, but a great deal of Oil and  
Phlegm.

**- . 2. SAGE is, by way** of Eminence, called *Salvia,* because in  
a .great many Disorders it is thought to .save and preserve Lise.  
Os this Herb there are two Species, the Wild and Garden Sage;  
of this latter Species there are two Kinds, the large and the  
small. The small Kind is the hest, and must he used in pre-  
paring the Vuinerary Water. It contains a great deal of Salt;  
and an Oil exalted into a Spirit. It has few passive Principles,  
and is cephalic, nervous, antihysteric, stomachic, and ape-  
rient.

3. MuGwORT contains a great deal of Salt, littie Oil, and  
Phlegm ; and is antihysteric, aperient, and Vulnerary. .

An BUGLE, or *Middle Confound,* Contains a considerable  
Quantity of Salt and Oil, and a great many passive Principles.  
It is vuinerary, corroborative, and proper in Disorders of the  
Lungs.

5. BE TONY contains an exalted Oil, and an essential or  
volatile Salt, but littie fixed Salt, Phlegm, and earth ; and IS  
cephalic, cordial, and Vuinerary. .........

6. SANICLE contains a considerable Quantity *Ns* Salt and  
Oil, a great deal of Phlegm, and littie Earth. It is astringens,  
consolidating. Vulnerary, proper in *Hernia,* used both inter-  
nally and externally.

- 7. Ox-EYE contains a great deal of-Oil and Phlegm, and a  
considerable Quantity. of Salt. It is Vuinerary, and prescrib'd  
for the *King’s-evil.*

8. THE SMALLER DAISY, *at Bellis Minor,* contains little  
Salt and Earth, but a great deal os Oil and Phlegm. It is used  
for stopping Haemorrhages, .consolidating Wounds, discussing  
Tumors, and carrying off inflammations of the Eyes.

\*\* 9. *Scrophularia Major, or* the GREATER FIG.wORT, con-  
tains a great deal of Salt and Oil, a considerable Quantity of  
Phlegm and Earth, and is apply'd for discussing scrophulous  
Tumors, which its Root resembles. It is also used to soften  
Hardnesses, to deterge Wounds,' and old Ulcers.

Io. PLANTAIN contains an Oil, a little Salt, but a great  
deal of Earth and Phlegm. Its Salt, which is acid, heing  
mixed with its Oil, and with a great many passive Principles,  
mi almost entirely absorb'd by them *, for* tins Reason the Plant  
is only (lightly detersive, but.it is imringent-and resreshing, on  
account of its Earth and Phlegm. It is used in Fluxes os .all  
Sorts, in .Haemorrhages, and Inflammations of the Eyes.

ώ II. AGRIMONY, or *Eupatorium,* contains a Considerable  
Quantity of Salt and Oil. Its active Principles are mixed with  
a great deal of Earth, and a little Phlegm; for which Reason  
it is detersive and astringent with regard to the Fences, jbut  
aperient with regard to the Urine. Itis thought.good sor Dis-  
orders of the Liver,and stops Fluxes. .

1 12. .VERVAIN contains a considerable Quantity of Salt and  
Oil, and is cephalic, Vuinerary, or desiccative. .It is used sor  
Disorders of the Breast, for the Stone and Dysentery, for gene-  
'.rating Milk in Nurses, and for the Pleurisy, it Is both admi-  
instated internally, and apply'd externally. ....

I3. *Absinthium,* or WoRMwooD, contains a sulphureous  
tSpirit, or rather an exalted Oil, in which its Smell:consists. It  
has also- great Store, of Salt, but littie Phlegm. It kills Worms,  
and corroborates the Stomach. It .is Vulnerary, .aperient, and  
.antihysteric. - ..

I4. *Fceniculum,* or FENNEL, contains a great deal of Salt,  
- and Oil half exalted to what we call Spirit; it also contains a  
considerable Quantity of EaIth and Phlegm. .Its Seeds, the  
largest and best nourish'd, come from *Florence,* are very much  
used in Medicin**e ;** they .dispel Wind,, and are.antihysteric.

Its Root is aperient; and its Leaves are proper for deterging  
that Sanies which sometimes infesta the Eyes, and accompanies  
Wounds. .

. 13. The *Hypericum,* or ST. JOHN’S-wORT, contains a  
pretty large Quantity of Oil, Salt, and Earth, but little  
Phlegm. It is Vuinerary, anti-hysteric, aperient, and nervous.

I6. BIRTHWORT is called *Aristolochia,* on account of ite  
heing proper for bringing away the After-birth. There are sour  
Species of it, the *round,* the *iong,* the *sinall,* and thet call'd  
the *Aristolochia Clematitis* ; all of them contain a great deal of  
Oil and Salt, a considerable Quantity Of Phlegm, but littie  
Earth. They are Vuinerary, detersive, antihysteric, and pro-  
per to resist Gangrenes, attenuate Phlegm, and assist Respira-  
tion. The two first are apply'd externally; and the Roots of  
the two last are used in such Medicines aS are design'd sor in-  
ternal Use.

I7. *Tolephium,* or ORPIN, contains a great deal of Phlegm  
and Oil, but Iitste Salt and earth. It is Vuinerary, astringent,  
moistening, and consolidating. It IS also proper for Herniae,  
Dysenteries, and deterging and wearing off Blemishes in the  
Skin. :

18. *Veronica,* or PAUL’S BE TONY, is of two Sorts, the'  
Male and the Female: The Male is of two Sorts, one strait,  
and the Other Crooked, and creeping on the Ground. This last  
is most in Use, and must he made Choice of in preparing **the**Vuinerary Water. All the Species of this Plant .contain a ,great  
deal of Salt and Oil, and are of an inciding, attenuating, deter-  
sive, Vulnerary, and sudorific Quality ; they are also proper for  
Ulcers of the Breast and Lungs, and for resisting Poison.

. I9. The *Centauriurn Minus,* or LESSER CENTAURy, con-  
tains a great deal of Salt, a Considerable Quantity os Oil **and**Earth, but little Phlegm. It is Vuinerary, detersive, drying,  
and aperient. It is proper for Scurvies, intermittent Fevers,  
Worms, Madness, Obstruction of the Menses, the Sciatica **and**Jaundice. ...

20. The *Millefolium,* or YARROw, contains agreat deal of  
Salt and Oil, and is astringent, vulnerary, discutient, and Pro-  
per to stop Fluxes, Haemorrhages, and Gonorrhoeas.

2I. *Nicociana,* **or** TOBACCO, is .universally known to he  
narcotic and vuinerary. It is customary to bruise it, and apply  
It to Tumors, .in order to discuss them, because it contains Spi-  
fits which attenuate the Matter, and open the Pores. It is also  
customary to infuse it in common Water for washing Tetters,  
and other Deformities of the Skin; but if the Water is too rich-  
ly impregnated with it, it is subject to excite Vomitings,  
I herein also a Syrupof it prepared for the Asthma. Decoctions  
of it are sometimes used by way of Clysters in Apoplexies, Le-  
thargies, and uterine Suffocations. It contains a Sulphur, and  
**a** Volatile Salt, so . penetrating, that in is scarce :fooner in **the**Stomach, than It stimulates its Fibres, and excites Vomiting.  
Its Oil is so strong an Emetic, that if a Person but holds his  
Nose a little above the Phial in which it Is contain'd, he Vomits.  
**I** myself Once .made a small Incision in the Skin of a Dog's  
Thigh ; and upon putting a .small Tent in it, which had been  
dint in .the. Oil of Tobacco, the Animal .was Violently purged,  
and Vomited almost immediately after.

22. The *Pilos.ella,* Or.MoUSErEAR, contains a considerable  
Quantity of essential Salt and Oil, little Phlegm, but a great  
deal of Earth. Lt is astringent, Vuinerary,. incraffating, proper  
for. Herniae, and .sor .stopping Haemorrhages, Dysenteries, .and  
other Fluxes. .’ si :. ..

23. *Mentha,* or MINT, is either wild, or grows in Gar-  
dens. Both Sorts contain a great deal of exalted Oil, .and Vola-  
tile Salt, and but littie Phlegm and Earth. Both Species corro-  
borate the Stomach, assist Digestion, dispel Wind, cure the  
Colic, Attenuate and dissolve Humours, and resist Gangrenes.

24. *iHyssopus,* or HYSSOP, contains a great deal os Volatile  
Salt, and exalted Oil, and but littie Phlegm, and Earth;' It is  
vulnerary, detersive, and aperient. It is used in Disorders of  
'the Breast and Lungs, such as the Asthma and Phthisis,  
‘ As the Vulnerary Water, or *Eau d\*Arquebusude,* has so high  
Encomiums passed upon it by Tome foreign Physicians, and is at  
the same time so littie known or heard of in our own Country,  
'Ἱhave abridg'd Mr. *Lesnerestes* Remarks upon each of its Ingre-  
oients ; that, knowing the Nature and Quality of every *Simple*apart, we might the the better able to form a time Estimate of  
'the Compound resulting from their Conjunction arid Preparation  
in the manner directed.

AS in this Process most of the Plants subjected to Distillation  
are none of the most succulent, it is proper to add-White-wine  
jto them, since .that .Liquor excites a Fermentation, .and.serves  
.to disengage .the..saline,-sulphureous,.and Volatile Parts of the  
.Ingredients. ‘.. . ‘

Care. must, he taken, that the Fine he not too strong during  
-the Distillation; lest the Matter should adhere to the Bottom of  
-the Cucurbit, and the Water drawn Off acquire, of course, an  
;empyreumatic Smell. After half the Liquor is distill'd, it is  
.proper to pour whet remains in .the Cucurbit upon a Linen  
-iCIoth, and Io. put frinm-a Press, in order to extract its Juice ;  
**after which it is to he return'd into the Cucurbit,** and again

subjected to Distillation. By this means the empyreumatic  
Smell of the Water maybe prevented: But a *Balneum Vaporo-.  
sum,* or a fufficientiy large *Balneum Maria,* are still more to be,  
trusted to in this Process. .

If we dry and bum the grofs Remains of thoso Herbs, make  
a Lixivium of then Ashes, draw the Salt from this Lixivium by  
Evaporation, and dissolve it in the distill'd Water, it will by  
that means become more detersive and discutient, than it would  
Otherwise have been.; *Lemery. Cours, de Chymie.*

**AQUA LIMACUM.**

*A Snail Water different from that of the Dispensatory.*

Take a great Peck of Garden-snails, and wash them in a  
great deal os Beer, and make your Chimney Very clean,  
and set a Bushel of Charcoal on Fire ; and when they are  
throughly kindled, make a Hole in the Middle of the Fine,  
and put the Snails in, and scatter more Fire amongst them,  
and let. them roast till they make a Noise; then take them  
out, and, with a Knife and coarse Cloth, pick and wipe  
away all the green Froth: Then break them, Shelis and  
all, in a Stone Mortar.

Take also -a Quart of Earth-worms, and scour them with  
Salt divers times oyer. Then take rwo Handfuls of Ange-  
lica, and lay them in the Bottom of the Still; next lay  
two Handfuls of Celandine ; next a Quart of Rosemary-  
flowers; then two Handfuls of Bears-foot and Agrimony ;  
then Fenugreek ; then Tnrmerick; of each one Ounce:

-Red Dock-root, Bark of Barberry-trees. Wood-sorrel,  
Betony, of each two Handfuls. Then jay the Snails and  
Worms on the Top os the Herbs; and then two Handfuls  
of Goose-dung; and two Handfuls of Sheep-dung. Then  
put in three Gallons of strong Ale, and place the Pot  
where you mean to -set Fine under it.: Let it stand All  
Night, or longer; in.the Morning put in three Ounces of  
Cloves .well beaten, and asmall Quantity of Saffron, dry'd  
.... to Powder; then six Ounces of Shavings of Hartshorn,  
which must be .uppermosh Fix Un the Head and Resrige-  
ratory, and distil according to Art.

This Water is an excellent Restorative, Very good when **the**Gout raises Flatulencies in the Stomach, and is laid to he effe-  
actual in even obstinate Jaundices. *' "sis*

*Medicated Waters sirsm. ihe College, ''' so. '*

*Aqua Aluminosa:* **ALUM W***for* **ER.**

Take of red Rose and Plantain Water, each one Pint; of  
white Sublimate and Roch-alum, each two Drams: Let  
the Alum and Sublimate he .rubb'd together, and he both  
.boil'd with the Waters, .in .a.Glass Vessel, .having a narrow  
Neck, .to the Consumption of .half the Quantity ; and  
after .fiveDays, when she Foeces.are settled, pour off the  
Clear for Uses .

- This is chiefly for external Uses, and most commonly comes  
under the Direction of a Burgeon, in Ulcers and cutaneous  
: Eruptions. The Steam of the Alum-water, when .-boiling, is  
carefully to he avoided by.the Operator, because lit may have  
ι bad Effects from its poisonous Qualities. Pt was first prescrib'd  
*-by Fallopius, Gap.-cfo^. de Morbo Gallico. .'.so . ' '*

**’ AQUA CALCMt** *Lime-Water.*

Take One Pound of Quick-dime, and pour upon it twelve  
Pints of boiling Water: - After the Ebullition ceases, and  
the Lime is settled totheBottom, pour off the -Clear *for*Use. . . . *- -s...: . -*

**-This is-kept inReadiness Tor VariousUsos, -both, internal and  
-external. E 'uri '"so- ’ ’**

**AQUA CAMPHORA-TA STYPTICA :** *Camphorated Styptic-.*

*. . .. .. . JVittcr. ..’ .' .st .'. . .*

Take of camphorated Vitriol, One ounce; steep it in three  
Pinte.os Spring-water, and let it stand .till the FceceS are  
sallen to the Bottom.

**AQUA SAPPHIRINA :** *Sapphire-colosqud Water.*

Take one Pint of Lime-water, of Sal Ammoniac one-Dram  
and an half: Let them he distblVed together,, and then  
. stand in a Brass Bason till the Liquorhecomes tinged of a

Sapphire Colour.- - - . .

**This, by** some, is greatly esteemed for clearing the Eyes  
**from** Specks and Films, if **two or three Drops be frequentiy**^instill'dinto **them . -**

**. . AQUA-FORT IS SIMPLEX Z** *Single Aquafortis. -*

Take crude Vitriol, throe Pounds; Nitre, two Pounds;  
beat and mix them wellPut the Mixture into an earthen  
Pot, call’d a long Neck; placesit upon a Pine; fit it to a  
Receiver, winch lute well with Clay, Sand, and cut Flax,  
- wrought together: Give a Fire of the first Degree for  
three Hours ;. in that time therewill come some red Fumes  
into the Receiver, which will again disappear; then raise  
the Fine to the second Degree, where keep it three Hours  
Ionger: Go on to the third and fourth, where keep it till  
the Receiver is free from, Fumes. When all is cold, take  
the Receiver off carefully, and keep the *Aquascortis* for  
Use.

**Aryp A-F ORTIs DUPLEX:** *Double Aquafortis.*

Take Vitriol, calcin'd almost to a Redness, four Pounds; of  
Nitre two Pounds, both made into sine Powder, and well  
min'd ; Put. the Mixture into an earthen long Neck, or  
Glass Retort luted ; set it in n reverberatory Furnace; fit  
and lute or) a .Receiver to itKindle a Fire, and proceed  
exactly as in the *Aqua-fortis Simplex.*

**... AqUA REGIA.**

’ ’ Take equal Quantities of Nitre and Sal Ammoniac, and put  
them into a Retort, big enough to remain above two  
Thirds empty; place it in Sand, and raise under it a Fine  
os the second Degree, which keep up while any thing  
continues to corne over.

*Anothcr* **AQUA REGIA.**

Take os Sal Ammoniac four Ounces; put it in Powder into  
a Matrass, *or* Glass Vessel of a good Bigness, and pour  
upon it sixteen Ounces of Spirit os Nitre : Place the Veflel  
. in a warm Sand-digestion, till all the Sal Ammoniac is dis-  
solv'd ; then pour it into a Bottle, and keep it stopp'd with  
- .Wax, Or a Glass Stopple. ’ .

This is honour'd with the Appellation *cAAqua Paegla,* because  
-it will distblve Gold, the Chymists *King of Metals*; but it is of  
no other Use-in -Medicine, than as, a Menstruum in some Pre-  
paratioris. \* -. "

- ’ There are many more .Prescriptions for *Astua Regia* in Chy-  
jni'cal Writers., all which consist os an Union of Spirit of Nitro  
with Spirit of Sea-salt. \*

AQUAEDUCTUS, ὑδροχόη, properly signifies a Pipe or  
i Canal to convey Water; hut is metaphorically applied to a Sort  
-Of bony Canal in.the *Os Petrosum,* which is otherwise call'd the  
*-Meatus Ccecus, Cochlearis,* and *Capreolaris.*

t AQUALA. Arsenic, or Sulphur. - *Johnson.*

- AQUALICULUS, ἐπίσειον, ἐπίσιον, properly signifies that  
’-Part os the Belly which reaches from the Navel to the Pubes.  
-It sometimes is fifed to express the Stomach, or intestinal  
Tube.

AQUARIUS. Iton. *Kulandus. Johnson.*

- AQUASTER, in *Paracelsus, Lib.* I. *de Vita longa, C. 3.*-is a sort of Vision, which represents something to our Sight  
- which has no real Existence, but only in Appearance.

AQUATUM, AoUEUM, ψδαρὲςν from ὓδωῤ, Water.

Watry, diluted. In *Scribonius Largus,* No 42. 26. we meet  
. with *Aquatior.* and*stqaptifsirnus.* It signifies also the *Chalaza* of  
an Egg. \_ - '

AQUEUS HUMOR OCULL The aqueous Humour of  
.-the Eye. See OoULUS.

AQUIDUCUS, ὑδραγῶγός. The fame as HYDRAG0G0S,  
' which see. The Term AQUIDUCUS is Found in *Caelius Aure-.  
' lianus. De Tract-Pastidn. Lib.* 3. *cap.* 3.

AQUIFOLIUM. The same as **AGRIFOLIUM,** which fee,  
AQUILA, -Offic. Mer. Pin. Iyo. *Aquilasalvasive aurea.*Wist. Ornish. 26. Raii Ornish. 58. Ejustl. Synop. A. 6. *Chry-  
feaios,* Aldrov. -Ornish. It I Io. Charlt. Exer. 70.'Jons, de  
.'Avib. 2. *Aquila German a,* Gesn. de Avib. 149. *Aquila Rega-  
lis,* Schw. A. 214. *Aigle Royal,* IBailon. desOyse, 89; THE  
.-GOLDEN EAGLE. ' 3

The Gall and Dung are the Parts used in Medicine: The  
-Gall, distill'd with Oil of Violets, is recommended hy *Arisen..  
nacsor* Painsand Ringings in the Ears; and the Dung against  
τ .Abortions, *Dale. ’ '*

AQUILvffi, ἀἐτοὐρ are Veins so .call'd first by *Philistius,*- which ascend through the Temples into the Head, according to  
*. Puffies Ephesius. ' si s' "s'*

*Aquila* hears Various Significations in Chymistry; if is the  
*. Spirit os. Mercury* ; and Sal Armoniac passes under that Name,  
. because of its -Levity in Sublimation ; and *Paracelsus* would  
.have *Aquila* often taken for *Mercurius Pracipitatus.'* It also  
signifies Arsenic, Sulphur, the Philosopher’s Stone, *etc... sculaati*

*. dus. Johnson. . .* **ψ - ; Γι-; -.' '-i -Ψ**

*Aquila Philosophorum* is the *Mercurius Metallorum,* reduced  
into its first .Matter.’ *Rulanduset* **'δ ' .**

*Aquila Alba is Mercurius Dulces*; also the Substance which is  
prepar'd os Sal Arinoniac and common Sublimate: Moreover; it  
is that spiritual and crystalline Sublimate, in the Composition of  
the Philosopher's Stone, whose Glue is the true Mercurial  
"Water. - .

*Aquilae lest crymeg* is the Liqtior prehar'd from the said Salt,  
sometimes in its fix'd, sometimes in its Volatile State.

*Aquila Coelestis* is the Panacea, or Cure for all Diseases, pre-  
pared os Mercury essentificated.

*Aquila Nigra* is the Spirit of that venomous Cadmia ball'd  
*Cobalt,* which some take to he the Matter os the Philosopher’s  
Mercurv. \_ -- ...

*Aquila Veneris* consists of Crocus, made of Verdegaise in a  
Reverberatory, and .join'd with Sal Ammoniac, seven times  
sublimated.

*Aquila* has many other Epithets bestow'd on it .by these sort  
of Authors, as *Rubra, Salutifera, Vitriolata, Expanse, Fixa,  
Hamaiica, Praecipitata, Folans,* &c.

AQUILEGI A, Offic. *Aqdolegia caerulea.* Ger. 935. Emac.  
1093. Mer- Psa. o. *Acluslegia silvestris,* C. B. Pin. 144.  
T0urn.Inst. 428. Elem. Bot. 34o. Dill. Cat. Giss.82. Rupp.  
Flor. Jen. I 31. *Aqailegia fylraostris flore simplici,* Buxb. 25.  
*Aqatiegiafloresimplici,* J. B. 3. 484.Rail Hist. I. 706. Synop.  
3. ^73. *Aifersqua,* Chab. *Aquilegia vulgaris flare simplici.*Park. Theat. 1367. . *Aquilegiasure coeruleo,* Merc. Bot. 2. I6.  
Phyt. Brit. 9.’ COLUMBINES. *Dales*

The Root of this Plant is pretty thick, at the Head sending  
forth many long and large Fibres, which run pretty deep into  
the Earth. - The Leaves grow upon long Foot-stalks, compos’d  
of a three-fold Division of aS many roundish Segments, cut in,  
and indented about the Edges, of a bluish-green Colour : The  
Stalks arise to be a Foot and a half or two Foot high, some-  
whar hairy, flender, and- of a purplish Colour, pretty much  
branch'd, and having several smaller Leaves set on, without  
Foot-stalks at each Division of the Branches. The Flowers are  
pendulous, of a fine blue Colour, each consisting of five plain,  
and five horned and hooded *Petala,* or Leaves, placed alternate-  
ly, the Ends of the horned ones heing crooked. When the  
Flowers are fallen, they are succeeded each by four or five  
longish taper Horns or Pods, set round about she Stalk, con-  
taining black shining Seed. Columbines grow: wild in several  
parts of *England,* but are not Very common, and flower in  
*May* and *Junes*

This .Herb is also call'd *Leonis Ossiculum\*,* but receives the  
Name of *Aquilegia,* because its Leaves, not as yet fully expanded,  
collect and gather a great deal of Rain-water. This Herb may  
.. also justly be call'd *Theriacaria,* on account of its remarkable  
Efficacy in curing malignant and Virulent Disorders. It is well  
known in Flower-gardens, on account of its Flower, which  
resembles King's Confound, and lasts throughout the whole  
Summer. When its Leaves first hegin to appear, it resembles  
the greater Celandine; and for this Reason it is also call'd *Che.,  
lidonia Sylensirti.* Its Flowers are of different Colours, some  
blue, some purple, some white, and some of them are indented.  
The blue is only used in Apothecaries Shops, where the Seed,  
the Flower, and the Heth, are all employ’d./- It is moderately  
.drying, opening, and healing. It purifies the Blond, and  
removes Obstructions of the Liver and Spleen. It dissipates the  
Bile, and is os singular Efficacy in curing the Jaundice. A  
. Powder or Emulsion of its Seeds, as also its distill'd Water, are  
of great Sendee in the Jaundice; in which Case its Extract may  
also be used with great Success. *Hornung. Cist. Med. P. si.*See also *Jo. Lang. Epist. Med. L.* 3. *C. 6. B. Tom. Epist. et  
Consi. Med. P. M.* 46 I. *Joh. Camerar. Hart. Med. P.* 19.  
*fo. Johnston Syntagma, Med. Pract. L.* 5. *Tot.* 6. *C.* 2. *Arttc.  
6. Hieron. Braunschweig. Thefaur. Paupcrum.* It removes the  
Scurvy. promotes a Discharge of Urine, and the monthly Eva-  
cuationS of Women; cures a beginning Dropsy ; is excellent  
for the Breast and Lungs ; resista all kinds of Poisons; cures  
Wounds, and removes Pains os the Belly and Matrix. Mothers  
.' ordinarily use its Seeds for their Children, when they have the  
. Meastes or Small-pox, by tying them up in .a Piece of Linen  
. Cloth, and steeping them among Beer. *Simon Pauli (Ssuadr.  
- Bolan. Clafs. 2.)* says, that he has given half a Dram os its  
Seed, with the Water of *Cdrduus Eeusdsictus,* to poor Peoples  
. Children in the Small-pox, and that by its means their Lives  
have been preserved. For.this Purpose, People ordinarily make,  
of this Seed, Mustard-soed, Water-crefles, and Melons, an  
Emussion, with Fumitory-water, Carduus-water. Viper-grass-  
water, that of Columbine-flowers and Fennel..' It is used with  
Success in malignant Disorders, and even in the Plague. It. is  
also by some extoll'd as a Specific in the Scurvy, *fob. Michael.  
. Not. in. Schrod. Pharm. Clusius* recommends a Quarter of an  
Ounce of this Seed, reduced to a Powder, and taken in Wine,  
in difficult and tedious Labours. It is also an excellent Remedy  
against a Vertins, *(Fr. Hoffman. Meth. Med. L. 1. Co* 29.  
*. Paulin. Obs. Med. Phys. QS. Cent.* 3. *et Obs.* 64. *Cent. An)* and  
against the Sciatica and Epilepsy, taken in hlack Cherry-water,  
j It is also commended in hysteric Disorders. The Seed, reduced  
to a Powder, may he given to Costive Children. The Root,

reduced to a Powder, and applied in Form of a Plaister to the  
Ears, removes Pains and Noises in them; and if there are  
Worms in them, kills them. *Camerar. in Hort.* says, that in '  
*Spain,* in order to prevent a Stone in the Kidneys, People,  
when they rise out of Bed, take a Piece of the Root in their  
Mouths, and chew it by littie and littie. The Flowers have a  
cordial Quality, and may be .taken as the other cordial Flowers.  
Many make cordial Syrups, Conferves, and Tinctures of them.  
They are also good in malignant Fevers, Small-pox, and Meastes.  
Its Syrup is excellent in Disorders of the Throat, such as the  
Quinsey, and in. those of the Breast. It is externally used in  
Scurvies os the Mouth, with the Addition of a littie sweet Spirit  
os Salt. Some also make a *Vinegar* of its Flowers.

AQUILENA. The *Consolida Regalis,* or Lark-spur. *Johns.*AQUOSA URINA,. is crude watry Urine.

AQUOSUS HYDROPS. See **ASCITEs.**

AQUULA. See **HyDATIS.**

ARA PARVA, βωμὸς μικροἈ A little Altar. A neat way  
os Filleting and Bandage, which, when fix’d, represents the  
Corners of an Altar: It was invented by *Sostratus,* and men-  
tion’d by *Galen dicFaseiii.*

ARABE, αραίβη, in *Hippocrates,* is expounded by *Erotian  
ispprijan,* Hurt or Injury. ........ . . . '

ARABICUS LAPIS. The *Arabian* Stone; It is like Ivo-  
ry, blemish’d with Spots.

Being levigated, and applied in a Cataplasm, it dries up the  
Haemorrhoids; 'and, when it is calcin’d, is used as a Dentifrice.  
*Dioseorides, Lib. 5. Cap.* I49.

The *Lapis Arabicus* is like Ivory’, drying, and astringent.  
*Oribasius, Med. Coll. Lib. 15. P. Aiiginet. Lib.sp;*

ARABIS MALAGMA, *ad Strumas et Phymata.* The  
*Arabians* Malagma for strumous Swellings, and Tubercles call'd  
*Phymata.*

Take of. Myrrh, Sal Ammoniac, Frankincense, liquid and  
dry Rosin, Crocomagma, Wax, each one Dram two  
Grains and .an half; of the Stone call'd *Pyrites,* four Drams  
ten Grains; to which some add of Sulphur two Drams  
. five Grains.. *Celsius, Lib.* 5. *Cap.* I B.

ARABICA ANTIDOTUS, *Hepatica.* The *Arabian* An-  
tidote for the Liver. . am -

Take of Myrrh, four Drams ten Grains; Coitus, one Dram  
two Grains and an half; white Pepper, *Indian* Leaf, each  
four Drams ten Grains; bruise them, and fist them, and  
give them in Mulsum: With this Antidote a Decoction of  
Abrotanom, in Water, should be drank; or some dry\*d  
Figs, with theirWeight in Honey, he eaten. *Myrepsus,  
. Sect. i. Cap.* 265. . . . i ss .

ARABICUM GUMML *Gum Arabic. See* **ACACIA** and  
**GUMMI.** It may he proper to observe here, that the antient  
Physicians, by κόμμι, " Gum," put indefinitely, that is, alone,  
without any Word to restrain Sts Signification, *meanGum Ara-  
bic. - ' . ....*

ARABIS. The same as DRAEA, which see.

u ARACA-GUAM. Α Species of the GoaVo-tree, accord-  
ing to Prse. : See **GUAYAVA.** *Raii Hist. Plant.*

;. ARACA MIRL *Pison.. Marcgrav.* A Shrub growing  
plentifully, in *Brasil,* and hearing ripe Fruit in *March* and *Sep-*

*: tember,* which has the sweetish Taste of Musk, and somewhat  
of the Savour of Strawberries: This, when candy'd and, pre-  
serv'd, is a pleasant Cooler, Astringent, and Strengthener, and  
supplies the Place of Marmalade of Quinces, Conserve os Roses,  
and the like.

Of the Leaves and Buds they prepare a very good Bath for  
internal as well as external Affections of the Body; for they are  
astringent; but especially the Root, winch also cures the Dysen-  
tery, and is peculiarly diuretic, and of fine Parts. *Rail Hist.  
Plant.*

ARACHYDNA *aut* ARACOIDES, *Honorii Belli,, J.* Β.  
*Vicia similis supra infra que Terram Fructum forms,* C. B. An  
*Theophrasti Araco opeotov,* Clus. *Arachidna Cretica,* Park.

. Tins is one of the four leguminous Plants, mention'd *by Ray,*that bear Fruit aS well above as under Ground. The other  
three are,

*Arachusfill) Terra Sisiquifera Dusitanica,* Park. ‘ τε'  
*Arachus,* ψπῥγμιος, *Americana, Peak. Mundubi Brasiliensi-  
bus,* Marcgr. . :

*Legumen Trifolium sub Terra Fructum edens. Mundubi de  
Angola,* Marcgr. - ..'.ἐν

Besides these, there is describ'd in the *Memoires de st Acad.  
Roy. for* I723. another Species under the Title of . - '

ARACHIDNOIDES AMERICANA. Os,  
*Arachidna ^ysudrifolia uillofa Flore* sen's, Nov. Plant. Americ.

**Gen. Plum. 49.** *Pistache du Tcrtre,* **2. I'2I.** *yManobi,* **Labat.  
4. 59.**

All the Difference hetween this and the former *Arachidna is,*that this last-mention'd, as in the Synonyma, hears-Cods under  
Ground, which hang to the Fibres of the Root.

- .ARACHNE, αραχνη,-a Spider. The same as ARANEUs;  
which see.

ARACHNOIDES, *cleuriscyoaSsu* from ἀροίγγή,.κ Spider, and  
ειδος, a Form. The external Lamina of the Pin Mater has  
been, by some Anatomists, made a distinct Coat, and call'd  
*Membrana Arachnoides.* **See PIA MATER. ' . '**

The Tunic also of the Crystalline Humour -os the Eye is  
call'd *Arachnoides,* or *Aranea.* Dr; *Nicholls,* sand afterwards  
*Albinus,* found the Means of injecting the Vesseis of this Coat,  
- - which run upon it like Rays from a Centre. But according to  
*Celsus, Rufus Ephesius,* and *Galen,* the Tunica *Arachnoides,* or  
*Aranea,*.as-that Coat winch immediately investa the vitreous  
Humour. *Celsius, Lib. J. Cap. J.* fays it was thus named by  
*Herephilati. . \**

ARACON, Brass, *Juhnson. . . " .*

ARACUS, a Plant thus distinguish'd^ "

*- Aracus, Vicia fyluestrio,* Ossie. *Aracus sive Cracca may orb*Park. Theat. IO7O. Merc. Bot; I. .20. Phyt. Brit. io. Mer.  
Pin. 9. *Viciafylvostrti, sive Cracca messor.* Ger. Emac. I227.  
Rail Hist. i. 902. Synop. 3. 321; *Vicia femine rotundo nigro,  
C.* B. Pin. 345.. *Victa angustis.olea,* Rivin. Irr. Tet. Dill. Cat.  
Giffi I07. Rupp. Florssen. 2II. *Vicia vulgaris, acutiore felis,  
femine parvo nigro,* Tourni Insta 397- Boerh; Ind. A. 2. 43.  
*Vicia vulgaris silvestris, semine parvo et nigro frugum,* J. B. ’2.  
3I2. *Vicia vulgaris silvestris frugum* i *Semine parvo et nigro.  
Cracca quibus.dam.* Chain I46. *Vicea fylvostris, semine nigro et  
variegato, folio acutiore,* Iiist. Oxon. 2. 63. *Vicia-segetum,  
Aracus, Cracca,* Mont. Inds 55. STRANGLE-TARE, or  
WILD VETCH. ς

It grows in Hedges, on Banks, and among Com. The  
Herb is in Use, and has the sameVirtues with the other Species  
of the Vicia. *Dale.*

ARACYNAPPIL, *Malis Aurantiis parvissimilis Fructus,*J. B. *Malo Aurantia parvis Fructibus similis,* C. B. -

This.Plant is only just mention’d by *Ray,* without any Spe-  
cification of its Virtues or Uses.

ARADOS, ἄραδος, in *Hippocrates,* signifies that Perturba-  
tion which is excited in the Stomach by concocting Meats of  
different Qualities, *Lib. de Rat. Vict. in Morb. acut.* Καἰ ἤτε  
τύψιν ἔχον, ουτε ὰραδον κακόν. " Which (Ptisan) has no Astrin-  
" geucy, nor is subject to raise Commotions in the Stomach."  
Where *Galen* expounds τὸ μηδἐ ἄραδον ἔχειν, by μηδεμίαν ἐν τῳ  
πὸττεοθαι ταραχὴ v εμποιεῖν, " causing no Disturbance in Con-.  
".coctiom" Ἄραδος also signifies any internal.Perturbation  
caused by purging Medicines, vehement Exercises, or other  
Causes.

- ARfEON, ἀραιὸν, signifies thin, rare, flow; and is opposed  
io πυκνὸς, thick, close, frequent. Thus ἀραιὸν πνεῦμα. *Lip.* I.  
*Epid,* is Breath rarely drawn, or with long Intervals of Time,  
as it is explain'd thy *Galen* and *Erotian. 'Basted atipedsa* are the  
rare, lax, and soft Parts of the Body, which are .easily receptible  
of any heterogeneous Matter, such as the Humours, σπογγοέι-  
δέα τε καὶ ἀραιὰ, the spongy and lax Parts of the Body, as the  
Lungs, Spleen, and Breast. *Lib. creel* ἀρχαίης ἰητρικῆς. . ;

ARAEON (rare) is properly whet contains large' Pores, as  
*Pycnum, ntURVar, (i* dense," is what has small Pores; but by'a  
Metaphor, Catachresis, or whatever you please to call it, they-  
are used to signify *lax* and *close.* Thus we call the Air and Fire  
*rare,* and the Water and Earth *dense,* transferring the Appella-  
tions to the very Elements, which are united, consist of similar  
Parts by Nature, and are incapable *of Pores. Galen: de Sant  
Tuenda. t -*

ARZEOSYNCRITOS, ἀραιοσύγκβιτος,- from ἀραιὸν, thin,  
and συγκρίνω, to constitute or frame. A Person of a thinCon-t  
stitution of Body. *Galen deBan. Tuend.*

ARssOTICA, ἀραιώίικὰ, from ἀραιόω, to rarefy. Things,  
or Medicines, winch rarefy.

ARALDA. The *Italian* Name for the Fox-gloVe. See  
DIGITALIS.

’ ARALIA, Beny-bearing Angelica. The Characters are:

The Flower consists of many Leaves, which expand in form  
of a Rose, and are naked, growing on the Top of the Ovary.  
These Flowers are succeeded by globular Fruit, soft and succu-  
lent, and full of oblong Seeds. *Millrtis Dictionary.*

*Aralia* is altogether like the *Araliastrum,* as to the Structure  
and Situation os its Flower; but its Berry consists of five Seeds  
placed round an Axis ; and its Leaves are branch’d almost like  
those of Angelica; and its Stalks (which in some Species are  
naked, and in others have Leaves set alternately) bear each  
several Umbeis at theTop, in the Form *os* a Bunch of Grapes.  
The Species of *Aralia* are,

**I.** *Aralia caule aphyllo, radice repente,* D. SaITazin. *Christo-  
pihoriana Virginiana, zarza radicibus surculosis et fungosis, Sar-  
fapartlla nostratibus dicta,* Pluk. Almag. 98. Tab. 238. Fig. 5.  
*Zarfaparilla Virginiensibus nostratibus dicta, lobatis urnbelliifera  
foliis Americana,* Ejusd. Almag. 3g6.

2. *Aralia caule foliose lavi,* D. SaITazin. . *Aralia Canaden..  
. sis,* Inst. Rei Herba. 300.

3. *Aralia caule folioso et hispido,* D. Sarraain.

*4. Analia arbores.cens sipinoscs,* D. Vaillant. *Angelica arbore-*

*suens sipinoscs, seu A.rLorTndica,s.raxinifoliosicortice spinifer,* Rats  
Hist. 2. *s.'jcsi.Christophoriana Arbitr aculeata Virginiensis,Plukl*Almag. 98. .Tab. 2O. \* \_ - .. . / ἈΓτι’ὑπερ

All the Species os these two Genera, except the last ojs each  
of them, are common in *Canada.* The Inhabitants Os that  
Colony, and those of *Virginia,* call the first Species of *Aralia*by the Name of *Sarsupartila,.* because its Roots have almost the  
same Figure and Virtues. Μ. *Sarrlenin* writes from thence,  
that he had a Patient who had heen cured of an Anasarca, about  
two Years before, thy the Use of a Drink made of these Roots ;  
and allures us, that the Roots of the second Species, well  
boil'd, and apply'd ‘by way- of Cataplasm, are very excellent  
for the curing of old Ulcers; aS also the Decoction of them,  
with which they bathe and syringe Wounds; and he does hot  
at all doubt, but the Virtues of the third Species are the same  
with those of the second. *Philoscph. Transect. Abridig. Vol. 5»*' . ARALIASTRUM is a Genus of Plants, whose Flower is  
complete, regular, polypetalous, and hermaphrodite; standing  
on the Ovary, which is-crown'd thsia Calyx cut into several  
Parts, and becomes a Berry, in which are, for the most part,  
two flat Seeds like a Semicircle, which, both together, repre-  
sent a sort of Heart. The Stalk, which is single, ends' in an  
Umbel, of which each Ray bears but oneTlower. ’ Above the  
middle of the Stalk come out several Pedicles, (as on that of the  
Anemone) on the Extremity of which grow several Leaved  
like Rays, or like an open Hand. The Species of this Genus  
are, . .

Ii *Araliastrum quinquefoliifolio, majus, Ninzin vocatum, D.*Sarrazin. *Ginofeng,* DeS Lettres edifiantes & ourieuses, tom.  
IOi '

2. *Araliasirunt quinquefoliifolio, minus,* D. Sarraziri. *Plan-  
tula Marilandica, foliis in summa caule ternsss, quorum unum-  
quodque estesnquesiartitm dividitur, circa mar pinesferrates,* No. 36.  
Rail Hist. 3. 658.’ ; . .

- 3. *Araliastrum fragrartiefolio, minus.* Di Vaillant. *Nastur-  
tium Marianum, Anemones silvatica foliis, enneaphyllon, storibus  
exiguis,* Pluk. Mantissi I35; Tab. 435. Tig.*Ti' Philosophy  
Transect. Abridg. Fol.* 5.

ARANEA, ἀραίχρῆ. The same as ARANEUS,, which see.

- ARANEA TUNICA. The same as ARACHNOIDES.,  
which see.

ARANEOSA URINA, ἀραχνιώδες τορα, *so Coac.* is Urine  
containing something like Spiders Webs, with a Fatness at the -  
Top; which indicates a Colliquation. *Celsus, Lib. 2. Cap.* 8.  
calls it *Urinam quaedam Araneis similia subsidentia astendentemei*“ Urine that shews something in it like Spiders Webs."

ARANEOSUS PULSUS, ἀραχνοΰίδὴς σφυγμός. a Spider-l  
like Pulse, is, as *Galen* defines it, ὸμικρὶς, ὑπὸ βραχεἴας ἄυρας  
σαλςυομένης κινούμμος, " a small Pulse, that moves as if it were  
shaken by short Puffs os Ain."

ARANEUS, Ossie. Schrod. 5. 337. Met. Pin. 203.  
*Araneus subsumus hirsutus, praelongis.pedibus, domesticus,* List.  
Hist. 59.' Raii Insect. 27. *Araneus Velarius,* quibusdam.  
*Araneas domesticus,* Mouff Theat. insect. I82. Jonsi de In-  
sect. 92. ' THE SPIDER. - - . Ἄ

It is more common than welcome in Houses. Both the  
- Spider and its Web are used in Medicine ': The Spider is said  
to avert the Paroxysms of Fevers, if it be apply'd to the Pulse  
of the Wrist, or the Temples ; hut is peculiarly recommended  
against a Quartan, being inclosed in the Shell os a Hazle-nut.  
The Web astringes and conglurinates, and is therefore vulne-  
rary, restrains Bleeding,, and prevents an Inflammation;

**ARANEUs NIGER, Ossie.** List. Hist. 77. Raii Hist. In-  
fect. 33. THE BLACK SPIDER. / .

It is common in Woods, Thickets, and Pastures.' Among  
the approved Remedies of Sir *Matthew Lister,* I find, that the  
distill'd Water of. Black Spiders is\* an excellent Cure for.  
Wounds, and that this was’one of the choice Secrets of Sir  
*Walter Raleigh. Lister, Hist. Dales*

The Spider which some call the Catcher, or Wolf, being  
beaten 'into a Haister, then sew'd up 'in Linen, and apply'd to  
the Forehead or Temples, prevents the Returns of a Tertian;  
The Web, apply'd, stops Bleeding, and keeps superficial Ulcers  
from an Inflammations

There is another Kind of Spider, which spins a white, fine,  
and thick Web. One of this Sort, wrapped in Leather, and  
hung about the Arm, will, it is said, avert the Fit os a Qpar-  
tan. Boiled in Oil of Roses, and instilled into the Ears, it  
eases Pains in thofe Parts. *Dioseorides, Lib. 2. Cap.* 68.

Thus we find, thatSpiders have in all Ages been celebrated for  
their febrifuge Virtues ; and it is worthy os Remark, that a Spi-  
der is usually given to Monkeys, and is esteem'd a sovereign Re-  
medy for the Disorders those Animals are principally subject to.

. The Country-people have a Tradition, that a small Quan-  
tity of SpidersWeb, given about an Hour before the Fit of an  
Ague, and repeated immediately before it, is effectual in  
curing that troublesome, and sometimes obstinate Distemper.  
This Remedy is not confin’d to our own Country ; for I am  
well inform'd, - that the *Indians* about *North-Carolina* have  
great Dependence on this Remedy for Agues, to which they

are -much subject ; and I am acquainted with a Gentleman  
long resident in those Parts, who assures me he was himself  
Cur'd by it of that Distemper.

The following Case, which is literally true, will he some  
Evidence in savour os the Virtue os Spiders Webs in intermit-  
tent Disorders. .

Some time in *April* 1742. I was desir'd, by Mr. *Crawley,* an  
Apothecary in *Berry-street,* to see one Mrs. *Radcliffe,* **who**liv'd in a Stable-yard at. the lower End of *Dukestreet,* near  
St. *Jumests Square.* Upon my first Visit I was inform'd, that  
she some time hefore came from *Nottinghamshire,* with an **inve-**terate Ague upon her, which return'd every Night at eight  
o’Clock, and continu'd *for* about nine Hours, the greatest Part  
of which Time she was delirious; and, indeed, during these-  
termission, she could not be said to he entirely free from the  
Fever. She was very big with Child, and told me, she had  
but a Fortnight to reckon, and that she had heen subject to Hy-  
steric Disorders all the Time of her Pregnancy.

She had, by the Advice of her Midwife, taken the Bark,  
without any good Effect. .

*As* theTime of her Delivery was so near, I judg'd it would he  
of some Importance to remove the Fever before her Labour, for  
Reasons too obvious to require mentioning. I therefore directed  
such Evacuations as her Condition would permit, and put her into  
a short Course of neutral Salts, aster winch I directed the Bark,  
which was for some time repeated in Various Forms, and with Va-  
rious Additions; but all to Very little Purpose, for the Fever ne-  
ver ceas'd for more than three Days, and during that time she  
was in a worse State of Health than even when her Fever return'd,  
being affected with an excessive Diarrhoea. In this State she  
Continu'd for about fixWeeks, having mistaken in her Reckon-  
ing about a Month ; and on or about *May* 26. in the Evening,  
she was seiz'd with Labour-pains, and much about the same  
time with her Fever-fit, the Consequence of which was an  
excessive Delirium. A Man-midwise was call'd, who, not  
finding she was likely to he deliver'd soon, left her, after  
having order'd her a Bolus, with Lapis ContrayerVa, and *i.*Cordial Julap. In the Night she was deliver'd, but the Gen-  
tleinan refus'd to attend her again, because he judged it impos-  
sible for her to recover, as I was informed. I was then again  
consulted, and was told there was an entire Suppression of the  
Lochia, and that the FeVer-sit constantiy returned at one  
o’Clock in the Day, and lasted nine Hours, never without a  
Delirium. Till *fune* 3. or 4. I us'd all my Endeavours to  
remove the Fever, and restore the Lochia ; which last I effected,  
hut in a Degree scarcely worth Notice; but the Fever perpe-  
tually return'd at one o'clock, and continu'd as usual, and had  
reduc'd her to an excessive Weakness.

In such a Situation I believe the Gentlemen of the Faculty  
will not think I did amiss, if, in pursuance of the Advice of  
*Celsus, I* chose to *try a. doubtful Remedy, rather than suffer the  
Patient to pcrisu without using any Means for her Rjelief.* Upon  
this Principle, on *June An* about Ten in the Morning, I order'd  
**a** Bolus, made of a Scruple of Cobweb, with some Syrup, to  
be given at Eleven o’Clock, and to be repeated hefore One. My  
Directions were punctually observ'd, and Mrs. *Radcliffe* miss'd  
her Fit that Day. At Night she flept well for seven Hours,  
which she had not done for some Weeks before. The next  
Day the Bolus was repeated : At Night she flept nine Hours,  
and has never since had any Return of her Fit, except once  
upon a Fright some Weeks aster, when the same Remedy again  
cur'd her. I must not omit taking notice, thet when the Fever  
**was** removed, the Lochia were very soon plentifully restored.

AS the Cobweb had no sensible Operation, that I could  
learn, it is a Task too difficult for me to account in a mecha-  
nical pray for the salutary Effects it produc'd; the Fact, how-  
ever, appears worthy of Regard.

Among the lower Class of animal Beings Called Insects,  
whose Bites or Stings are made Venomous, is the Spider; which  
altho' in ours, or some colder Climates, they are less dreaded,  
yet even with us there are some (according to the Observation  
**os** the curious Dr. *Lister,* and such are generally of the octon-  
ocular Kind) whose Bites are pernicious, and not to he con-  
temned ; an Experiment of which was made by the renowned  
*Harvey,* as we may find by the following Passage.

" Having, for Trial-sake, prick'd my Hand with a Needle,  
" I after rubbed the Point of the same Needle with the Tooth  
" of the Spider, and perforated the Skin therewith in another

Part of my Hand, hut could distinguish no Difference in  
" the Sense of the Punctures t However, there was one re-  
.U markable enough in the Skin ; for, in the envenom’d Pun-  
" cture, the same was soon raised up into a Tubercle, looking  
**"red** with Heat and inflammations, fifing **up as** it **were to**" shake off the inflicted Evil. "

But the Spider, swallow’d and received into the Stomach,  
whether of Man or other Animals, is not always alike hurtful,  
of which *Moufsett,* in his Treatise of Insects, gives a singular  
Example, and which may he inferr’d from their heing so much  
coveted by small Birds, to whom they are the greatest Dainties,  
and which they pick up without Distinction, A further Proof

os their bring inoffensive. Otherwise than by their Bites, we  
may take from their Webr, so much in Request among the Ana.  
tients, and at this Day, by the common People, apply'd to  
recent Wounds, .on account of the Flux of Blood, which  
are, according to *Celsus,* a noble Agglutinative for small Hurts:  
There are even some who held the Humour flowing out of  
them Bedies, as a great Secret for these Purposes, so sar are  
they from being thought hurtful by such.

**A** yet farther Proof of their heing inoffensive is set down by  
*Myouffett,* which is, that Eggs os these Insects, being depo-  
sited on some Fruits or Herbs, are frequently (as may he made  
apparent) taken in, thss unobserv'd, and well digested by the  
most tender Stomach.

Signior *Redi takes Notice, that this Creature, altho' it* prove  
poisonous when instilling its Juice into the Wound, yet may it  
not happen fo at all times when taken into the Stomach ; to  
confirm. which. Dr. *Fairfax* alleges Examples of several Per-  
sons well known to him, (himself having been an Eye-witness  
to several of the Experiments) who have commonly swallow'd  
Spiders, eVen of the rankest Kind, without any more Harm  
than happens to Hens, Robin-red-breasts, and other Birds, who  
make them their daily Food. . . '

*Swammerdam,* in his Description of this Creature, says, that  
those Parts which are called by some others its Teeth, he rather  
takes for two strong and spiked little ClawS; Or the pointed  
Pans of two littie and less conspicuous Feet, rather than Teeth  
properly, not much differing in Structure from the Sting of **the**Scorpion, with which they prick the Part in like manner with  
it : And if so, saith he, there will he littie other Difference’  
than this, that the Spider carries its double *Unguiculi* or *Aculei*in the Fore-part of the Breast, whilst the Scorpion darts out his  
single one from the hinder.Part of his Body. These *Unguiculi,*according to our Author, are made up of two littie Joints or  
Claws, with which they not Only catch their Prey, hut trans-  
fix and wound the same, afterwards sucking up the Juices of  
their Captives. Dr. *Lister* takes notice of those forked Claws/  
hut fays they proceed out of the Mouth itself os the Cream re:  
*Grodart* fays much the same ; whilst Dr. *Mead* tells us. That  
the Spider which lives upon Flies, Wasps, and the like Insects,  
is provided with a hooked Forceps, placed just by the Mouth,  
Very sharp and fine, with which he pierces the Flesh of serose  
little Creatures caught in his Web, and at the same time in-  
fuseth a Juice into the Puncture, by which means the Animal  
being kill'd, he sucks out the Moisture from the Body, and  
leaves it a dry husky Carcase.

*Leewenhoeele* would have the Poison discharged from the Claw  
itself, at the same time the Wound is inflicted, contrary to  
Dr. *Mead,* who upon repeated Trials affirms. That having  
fired its ClawS upon the Prey, he observ'd a short white *Pro-  
boscis* thrust out *os* the Mouth, which instilled a Liquor into the  
Wound.

*JucobatiHoefnagel,* (taken notice of, as I remember, *\sy Swam-  
merdam)* Painter in Chief to his Imperial Majesty *Rodolph,' r*hath exactly colour'd by the Life five-and-thirty several Spe-  
cies Of this Insect, with three hundred others, which are since  
cut upon Copper, and printed with the same Emperor’s Licence zand Privilege, being not inferior to those os *Goedart.*

But if our *Engli/h* Spider be not so venomous, yet those of  
some other Countries are reported to he so in a Very high De- .  
gree, insomuch that *Scaliger* takes notice of a certain Species  
of them, (which he had forgotten) whose Poison was of so great  
Force as to affect one *Vincentinus* thro\* the Sole of his Shoe, by  
only treading on it. EVen in *Gascony* he observes, there is a  
Very small Spider, which, running over a Looking-glass, will  
crack the same by the Force of her Poison *(A more Fable).*

Remarkable is the Enmity recorded hetween this Creature  
and the Serpent, as also the Toad: Of the former it is reported.  
That, lying (as he thinks securely) under the Shadow os some  
Tree, the Spider lets herself down by her Thread, and, striking  
her Proboscis or Sting into the Head, with that Force and Ef-  
ficacy, infecting likewise her Venomous Juice, that, wringing  
himself about, he immediately grows giddy, and quickly after  
dies.

When the Toad is bit or stung in Fight with this Creature,  
the Lizard, Adder, or other that is poisonous, she finds Relief  
from Plantain, as is said, to which she resorts, and for which  
that Plant is reckon'd one of the Specifics.

in her Combat with the Toad, the Spider useth the same  
Stratagem as with the Serpent, hanging by her own Thread  
from the Bough of some Tree, and striking her Sting into her  
Enemy's Head, upon which the other, enraged, swells up, **and**sometimes bursts. To this Effect is the Relation of *Erasimus,*which he frith he had from one of the Spectators, of a Person  
lying along upon the Floor of his Chamher in the Summer-  
time, to steep in a supine Posture, when a Toad, creeping out  
of some green Rushes, brought just before in, to adorn the  
Chimney, gets upon hi5 suedes and with his Feet sits across  
his Lips. To force off the Toad, says the Historian, would  
**heve** been accounted sudden Death to **the** Sleeper ; and to leave  
her there. Very cruel and dangerous; fo that upon Consultation

It was concluded to find out a Spider, which, together with her  
Web, and the Window she was fasten’d to, was brought care-  
fully, and so contrived as to he held perpendicularly to the Manis  
Face; which was no sooner done, but the Spider, discovering  
**his** Enemy, let himself down, and struck-in his Dart, afterwards  
**betaking** himself up again to his Web ; the Toad swell'd, but as  
Zet kept his Station : The second Wound is given quickly after  
y the Spider, upon which he fwelis yet more, but remain'd  
alive still. The Spider, coming down again by his Thread, gives  
the third Blow; and the Toad, taking off his Feet from over the  
Man's Mouth, fell off dead, ’ τ ’ so'

\* And so much for the historical Part : I shall say somewhat  
now with relation to the Effects and Cure of the Poison ; an  
Instance of which I rememher, when a Very young Practitioner,  
being sent for to a certainWoman, whose Custom was usuaily,  
when she went to the Vault hy Candle-light, to go also a Spider-  
hunting, setting Fine to their Webs, and burning them with  
the Flame of the Candle still as she pursued them. It happen'd  
at length, after this Whimsy had been follow'd a long time,  
one of them sold his Use much dearer than those Hundreds she  
had destroy'd ; for, lighting upon the melting Tallow of her  
Candle, near the Flame, and his Legs being entangled therein,  
so that he could not extricate’ himself, the Flame or Heat  
coming on, he was made a Sacrifice to his cruel Persecutor,  
who delighting her Eyes with the Spectacle, still waiting for  
the Flame to take hold os him, he presentiy burst with a great  
Crack, and threw his Liquor, some imo her Eyes, but mostly  
upon her Ups ; by means os which, stinging away her Candle,  
she cry'd out for Help, as sansying herself kill'd already with  
the Poison. However, in the Night her Lips swell'd up ex-  
cessively, and one of her- Eyes was much inflam'd ; also her  
Tongue and Gums were somewhat affected; and, whether from  
the Nausea excited by the Thoughts os the Liquor getting into  
her Mouth, or from the poisonous impressions communicated by  
the nervous *Fibrillee* of those Parts to those os the Ventricle, a  
continual Vomiting attended : To take off which, when I was  
call'd, I order'd a Glass of mull'd Sack, with a Scruple of Salt of  
Wormwood, and some Hours aster a Theriaca! Bolus, which .  
she flung up again. I embrocated the Lips with the Oil Of  
Scorpions mix'd with the Oil of Roses; and, in Consideration  
of the Ophthalmy, tho' I was not certain but the Heat of the  
Liquor, rais'd by theFlame of the Candle before the Body of the  
Creature burst, might, as well as the Venom, excite the Dis-:  
turbance. (althod Mr. *BoylPs* Case of a Person blinded by this  
Liquor dropping from the living Spider, makes the latter suffi-  
cient) ;' yet observing the great Tumefaction of the Lips, toge-  
ther with the other Symptoms not likely to arise from simple  
Heat, I was inclin'd to believe a real Poison in the Case; and  
therefore, not daring to let her Blood in the Arm, I did, how-  
ever, with good Success, set Leeches to her Temples, which  
took off much of the Inflammation ; and her Pain was likewise  
abated, by instilling into her Eyes a thin Mucilage of the Seeds  
os Quinces and white Poppies extracted with Rose-water ; yet  
the Swelling on the Lips Increased; upon which, in the Night,  
she [wore a Cataplasm prepared by boiling the Leaves os Scor-  
dium. Rue, and Elder-flowers, and afterwards thicken'd with  
the Meal os Vetches, in the mean time, her Vomiting having  
left her, .she had given her, between whiles, a littie Draught os  
distill'd'Water os Carduus Benedictus and Scordium, with some  
of the Theriaca dissolved ; and upon going off os the Symptoms,  
an old Woman came luckily in, who, with Assurance suitable to  
those People, (whose Ignorance and Poverty is their Safety and  
protection) took Off the Dressings, promising to cure her in two  
Days time, altho' she made it as many Weeks, yet had the  
Reputation of the Cure ; applying only Plantain-leaveS bruised  
and mixed with Cobwebs, dropping the Juice into her Eye,  
and giving some Spoonfuis of the same inwardly, two or three  
times a Day.

*1 must remark upon this History, which is from* Turner, *that  
the Plantain, as a Cooler, was much more likely to cure this  
Discordor, than warmer Applications and Medicines.*

The same young Woman told me, hefore this Accident  
happen'd to her, the Smell of their Burning oftentimes so af-  
fected her Head, as that the Objects about her seem’d often to  
turn round ; she grew saint also with cold Sweats, and some-  
times a light Vomiting ; yet so great was her Delight in tor-  
turing these Creatures, and beating up their Quarters, that  
she Could not forbear, till one of them thus alarmed her.

Something akin to this was the Case related by *Nic. Ni-  
cholas,* of a Man he saw at his Inn in *Florence,* burning a large  
black Spider in the Flame of a Candle, and staying some time  
in that Place, from the very Fume thence arising, grew feeble,  
and fell into a feinting Fit, suffering all Night great Palpitation  
**at the** Heart, and afterwards a Pulse so very low as was scarce  
**to** be felt. **He** was recover’d, says the Relator, by giving  
him Theriaca, mixed with the Species Diamofchu, and Pow-  
tier of Zedoary.

**In** the same City, *Nic. Florent,* relates, there happen'd a sad  
Misfortune in **a** certain Monastery, by which many of the  
**Monks received their- Death, by drinking Wine incautiously**

out os a Vessel in which a certain venomous Spider was found  
drowned, notwithstanding what hath been before said, of their  
heing inoffensively, taken into the Stomach ; but these latter  
very likely might he widely differing, if not in them outward  
Form, yet in their inward compounding Particles, or their ma-  
lignant Nature and Properties.

*Xdalen,* taking notice of this Insect, subjoins this interroga-  
tion: Who would think so small a Creature should work so  
mighty an Alterationurpon the whole PodyOs Man, as we find  
she does, only by a little Dart or Sting just entering the outward  
Skin, by which certainly she conveys a poisonous Moisture, or  
something, however, more spirituous, yet still Venomous to the  
Blood ? ..

*Senaertus* takes. Notice of the Signs of this Bite or Sting to  
be a Stupor or Numbness upon the Part, with a Sense of Cold,  
Horror, or Swelling of the Abdomen, Paleness os the Face;  
involuntary Tears, Trembling, Contractions, a perpetual De-  
sire to make Water, Convulsions, cold Sweats; but these latter  
chiefly when the Polson has been received inwardly.

As to the Cure, not flighting the usual Alexipharmlcs taken  
internally, he says, the Place bitten most he immediately wash-  
ed with salt Water, or a Sponge dipped in hot Vinegar, or foa .  
mented with a Decoction of Mallows, Origanum, and Mother  
of Thyme; after which a Cataplasm must be laid on of the  
Leaves of Bay, Rue, Leeks, and the Meal of Parley, boiled  
with Vinegar, or *of* Garlick, and Onions, contused with Goats .  
Dung, and fat Figs. Mean time the Patient should eat Gar- .  
lick, and drink Wine freely.

But if the Poison were admitted into the Stomach, Vomiting  
must be procured for its speedy Discharge, and then some pro-  
per Antidote prescribed ; among which *Gesuer* commends be-  
yond all others the purest, whitest, and fittest Rosin resembling  
Frankincense; *Fracasiorius,* Bole and Vinegnir taken inward-  
ly, with which he recovered a Person stung, or bitten in the  
Neck, by a Venomous Spider. *Turner "de Morbis Cutaneis.*

*' Celsus, Lib. Se Cap. lay.* advises to lay a Cataplasm of Rue  
and Garlick, beat np with Oil, to the Part wounded by **a**Spider, or Scorpion.

ARANTIA, the same aS AURANTIUM, which see. *Blanc.,*ARARA *Fructus fecundus. Cap.* 21. *Lib. st.. Exot.* Cluss .

*Arora Fructus Americanus,* J. B. "

It grows in *Cayanca* ; the Inhabitants bruise it, and boil it in  
Water, with which they wash malignant Ulcers.. They say.  
also it is good to loosen the Belly, which I suppose is meant of  
the Kernel. *Rail Hist. Plant.*

. ARATICU. *Ray* mentions three Sorts os Trees under  
this Name. The first is the ’ ' .

**ARATICU** *prima seusimpliciter dicta,* Francisci Redi Expe-  
riment. Natural, *p. yq. Araticu Ponhe,* Marcgrav. & Pison;  
This Dr. *Robinson* thinks is THE SOUR-SOP.

The Tree is like an Orange in its Trunk and Boughs, and  
the Colour of its Park, but unlike in Leaves, Flowers, and  
Fruit.

The Leaves, scorched in the Fire, and apply’d in Oil to' ati  
Abscess, maturate, break, and heal It in an excellent manner. .

The second is the

**ARATICU APE,** Pisio. Marcgrav. Redi Experim. Nat.  
*p.* 77. *Nostratibus,* THE CUSTARD APPLE. *An Anorta  
Oviedi ?*

**ARATICU** *demaio Pison. An Baly Insulae Fructus, aspero  
Cortice,* **Clus. ?** *Paii Hist. Plant.*

ARBOR, δένδρον, a Tree, is defined to be a woody Plant,  
the biggest of all in Thickness and Height, whose Stock is per-  
ennial, and single by’Nature, and is divided into many larger  
Branches, winch the *Greeks* call ἀκρέμκναστ, and όζους; and after-  
wards into many small Branches [Sprigs}, which the *Greeks*call κλάδος, and the *Latins Surculos. Milrrtis Dice.*

**’ARBOR** *Virgini ana, Citriae vel Limonia Folio, Benzoinum  
fundens,* H. A. The Benjamin-free, *vulgo.* This Tree is  
found in great Plenty in most Parts os *Virginia* and *Carolina,*and is kept in curious Gardens of Trees, amongst many other  
Plants os those Countries, here in *Englands* When it was  
first introduced, it was generally believed, that the Gum Ben-  
jamin of the Shops was an exudation from this.Tree ; hut it is  
now thought to proceed from a Very different Tree.

**ARBoR** *Zeylanica, Cotini Foliis, subtus Lanugine villosis. Flo-  
ribus albis Cuculi modo laciniatis.* Pluk. Phyt. THE SNOW-  
DROP-TREE. su si . . .si ..

**ARBOR** *Americana, pinnatti Fraxini Poscis, Fructu reniformi.  
Phaseolum exprimenti.* Pluk. Phyt. SPANISH ASH.

**ARBOR** *baccifera laurisulia aromatica, Fnuctu viridi caly-  
culato racemosa* Sloan. Cat. Jam. The Winterss-bark, or  
wild Cinnamon-tree. It grows in the Low-lands of *Jamaica*in great Plenty, to the Height osthirty Feet, or more. The  
Leaves, Fruit, Bark, and every Tart of this Tree are very  
aromatic, hot, and biting to the Tastes The Bark is used as  
Spice in most of the *Engliso* Plantations *in America,* and was  
formerly pretty much used in Medicine in *England,* under the  
Tide of *Canella Alba,* or *JPhite Cinnamon,* but at present it is  
not much in Use, ; -

. 1 ARBOR *laurifolia venenata. Folio leviter serrato oblongo cb~  
‘ tuso, copiosam Lac praebens.* Sloan. Cat. THE POISON-

TREE: ' ...

This Tree grows plentifully in *Jamaicas sond* other warm  
Parts of *America.* It abounds with a milky Juice, which is  
accounted very poisonous, if the Leaves are broken, the Juice  
will flow out very fast; and, if it falls on Cloth, will cause it to  
wash in Holes, much after the same manner as the Juice of the  
Manchineel-tree. . \

- ArboR *Americana, Fraxini Foliis, Fructu crnoidr.* The  
Mahogany-tree. It grows chiefly on the North Side of *Ja-  
maica.*

**' ARBOR** *excelsa. Coryli Folio ampliore.* Houst. It grows only,  
at *Campeachy.*

AinBoR *in Aqua nascens. Foliis latis acuminatis et non den—  
tatis. Fructu oleagina minore. Catese. Hist. Nat.* THETUPE-  
LO-TREE. In gr ows in *Virginia, Maryland,* and *Carolina.*

**ARBOR SAPoKARIA,** Offic. *Arbcr saponaria Americana,*Raii Hisp 2. I548. *Prunisera racemosa, folia alata, casta '  
media, membranulis utrinque extantibus denata, fructu saponario.*Cat. Jamaic. I84. Sloan. Hist. 2. I3I. *Pruniseraseu Nuci-  
pruni fera, fructu saponario orbiculate mmecocco nigre, Ame-  
ricana,* Plult. Phytog. 2I7. Fig. 7. *Naciprunifera arbor  
Americana, fructu seponaris orbiculato monococco nigra,* Pluin  
Almag. 265 . *Arbor Mastica provinciae fructu avellanae jimili,*Lact. 26o. Joof. Dendr. II4. *Quits,* Pifon. (Ed. I658.) I62.  
*Qyity Brastlieastbus,* Marcg. I13. *Sapondria sphaerula,* Chain  
2,2: *Spponaria sphaerulae arboris stlicifolia,* J. Β. I. 312.  
*Nauculae sapenaria non edules,* C. Β. Pin. 5II. *Sapindusfoliis  
rastae alata innaseentibus, Tourn.* Imi. 639. *Bacca Bermu-  
densas.* Marl. Obf. SOAP-BERRIES.

It grows in *Jamaica,* and other Parts of the *West-Indies ;*the Fruit is ripe in *October,* and, when dry, is spherical, of a  
reddish Colour, and less than a Gall, of a large Eye, and a bit-  
**ter** Taste, but no Smell, containing one round black Stone.

It is much recommended against the *Chloresis,* and the Ber-  
ries are reckoned a-singular and specific Remedy against that  
Distemper, working a perfeci Cure after an inesseolual Use of  
Chalybeates. The Spirit, TinSure, or Extracti are more  
proper to be used than the crude Berries.

' -ARB0R VITA, Offic. Ger. II87. Ernac. I368. Park.  
Theas. I478. Rail Hist. 2. I4o8. *Arbor Vitae, serve Pa-  
radistaca.* Chub. 73. *Arbsr.Vitae, dure Paradijiaca vulgo dicta  
odorata ad Sabinam accedens,* J. Β. I. 286. *Arbor Vitae, Thuya,,*Mont. Ind. 37. *Arbor Cupresse stmilis in Syria,* Joof. Dendr.  
332. *Thuya Theophrasti,* C. B. Pin. 488. Tourn. Inst. 5S7.'  
Elern. Bos. 489. Boerhi Ind. A. 2. I8o. THE TREE OF  
LIFE.

' It is a Native of *America,* but is never sound in *Europe, ex...*cept in the Gardens of the Curious. The Leaves are used as  
an Alexipharmic, and Diuretic. *Mont.*

It is an opening and warming Piant, provokes the Menses,  
and is good against the *Chloresis* ; bruised with Honey, it dis-  
solves Tumors. The Oil is commended against the Gout, be-  
ing rubbed on the Part; for it acts like hire, by stimulating and  
opening. It cleanfes Beds from Lice and Fleas. *Boerh. Hist. ’  
Dale.*

'This Tree never grows to any Bigness with us in *England,.*heing a Stranger, and only planted in Gardens. The younger  
Branches are flatfish and tough, hearing on each Side several  
winged Leaves, which grow thick together, scaly, fomewbat  
like Cypress, but are smooth, and not prickly at the End, and  
very fiat; they heve a strong resinous unpleasant Scent, which  
some compare to old rotten Cheese. It bears little small scaly  
white Cones at the Extremities *of* the Branches. It came ori-  
ginally from *Canada.*

The Leaves have a digesting attenuating Faculty. *Parkin-  
sen* says, that, chewed in the Mouth for several Mornings fasting,  
they heve done great Service in expectorating and freeing the  
Lungs from thick purulent Phlegm. It is but rarely ofed.  
*Adiller. Bet. Off. - '*

This Tree receives the Name of *Arbor Vita,* or *The Tree of  
Life,* because it flourishes with a perpetual Grcennefs, and  
breathes a fragrant and deheious Odour: It is allo called the  
*Cedrus Americana,* and the *Arbor Semper Viridis. It is sin-*ported into *Eurppo* from *Canada in America,* and only to be  
sound in the Gardens of the Curious. It is at all Seasons  
cloathed with its Leaves, which, though they become some-  
what pale in the Winter-time, do nevertheless resume their  
native Splendor, and usual Verdure, in the Spring. The Tree  
itself is strait, hut rough and uneven in its Surface; its Bark  
is of a kind of intermediate Colour between Red and Brown,  
and is unequal and scabrous. The Wood itself contains a Gum,  
and sends forth a strong, but, at the same time, an agreeable  
Smell. In the Beginning of the Summer it bears small yellow  
Flowers, which contain and sold up in them, as in a kind of  
Turbant, a hitter Seed. *Castor. Durantes* informs us, that  
there is a Species of this Tree principally found in *France,*which is of a warming and drying Nature, of a somewhat  
hitter Taste, but of a very agreeable Smell; and that it also

preserves , the Health, and protracts the Life of Men. This  
Tree, says *Cornerarius, in Hire. pis.Ca.* is deservedly had in  
Esteem, not ouly on account of its fragrant Smell, which is  
so strong, that its Branches, bmifed and applied to the Nostrils,  
sometimes occasion a Discharge of Blond from them ; but also  
on account of its other valuable Virtues and Properties. From  
it there is distill'd a Water and an Oil which prove serviceable  
in Paroxysms of the Gout, if duly, applied to the Parts affectsd.  
The Bassam and Oil of *Arbor Vita,* or *The Tree, of Life, were:*very much used during the Time, of the Plagwe.in *Drefden.  
Job. Mich. Nats St Schroder. Pharm. Barth. Zorn. Botanoleg.^***. ARBOR BACCIFERA CANARIENSIS. dine VER-VA MORA.**

**ARBOR BFNzoIjiIEERA. See BrNzOIjr. ῖῖ - ῖ :  
ARBOR BRAsILIANA** *juglandistmilis.* **See Cutdur.  
ARBOR CAMEJIoRIFERA.. .See CAMPnoEA. r** *‘si-sii .***ARBOR CORA'LZ. See CoRALLODENDseoNs τί . ,  
ARBoR CREEIrANs. See HUAA. 76... ’  
ARBOR EXOTICA** *FraXini Fol.* **See NEGUNDo..**

**ARBOR FEBRIF0GA** *Peruvians.* **See QuiNnUINA.  
ARBOR FRAkiIEIEoLIO, C. B. See AzEDAEACH.  
ARBOR JUDJE. Seo SILIoUAegiRUM.**

**ARB0R LANIGERA** *Bantii.* **See,GosSypIUbr.**

**ARBOR LAVESDUL.X FOL.,** *Cluse '* **See FtioyEX** *lndicex***or** *Lav. Fol. l - -- .* **— y j ' \_**

**ARBOR LAURIEOLIA SIriENsIs. τ See** *Licati.su***ARBOR MANNIFERA. See MANNA. 'et'jo  
ARBOR PENTARHYL LoS** *Virgine* **See PENT Ar HyLnos,  
ARBOR DE RAYZ. See FICUS INDICA. τ**

**ARBOR S.THOMJS. sice MANDAErs. ':"ί - -, .. .ἐν  
ARBOR SEiNosA.** *Virgin.* **See HERcusiIis CLAvam  
ARBOR TrNcToRtA. , See TINeT’oEImi ῖ τ ί ς  
ARBOR TULIPIFERA. See TutlEIFERA.**

**ARBOR VINIFERA. See CoUTost.**

**ARBOR UVIFBRA TABACENSIS. See UvIFERA. T**

ARBOR DIANA is a sort of Crystallization of Mercury,  
and Silver dissolved in AQUA-FoRTIs, which runs out in  
Branches like a Tree. ’ - -

ARBOREUS, Arboreous, of, or belonging in, of of the.  
Nature of Trees. An Epithet which Botanists apply to those  
Fungofes or Mosses which grow on Trees, in Distinction from,  
those which grow on the Ground, as Agaric,r'Jews-ear, fir.,  
*Millers Dictionary.*

ARBUSCULA, δένδειον, a Diminutive from *Arbor,* a Tree.  
A little Tree, or Shrub. '. ' . ;.si - .

**ARBUscULA** *Asaicana repens. Folio ad Latera crispo, ad  
Polygona relata. Boerh. Ind. alt.* An *African*. trailing Shrub,  
with curled Knot-grass Leaves, and .Flowers, somewhat re-  
sembling thofe of Orach. It is preserved in many Gardens.,  
for Variety rather than Beauty. *Miller’s Add.*

**ARBUSCUI.A** *Coralla ides.* **See CoRALLODENDRoin.**

ARBUTUS, Offic. Ger. I 3 Its. Ernac. I 496. Parke Theas.  
I489. Raii Hist. 2. I576. Synop.. 3. 464. MeI. Pin., 9.  
*Arbutus, Unede Theophrasti,* Pbyt. Brit. Io. *Arbutus Coma-,  
rus Theophrasti, j.* B. I. 83. Chain 4. *Arbutus folia serrato, .*C. B. Pin. 46O. Tourn. Irish 599. Elem. But. 47 I. Boerst. '  
Ind. A. a. 2I7. Jons Dendr. 64. Pluk. Almag. 49. *Uneda ;  
PlinU vulgo,* Herm. Cat. Hort. Lugd. Bat. 634. THE.  
STRAWBERRY-TREE.

*It* grows in Woods and Thickets, that are warmly situated.  
The Fruit is used, which is of a sharp and austere Nature.  
*Dale.*

The *Arbutus* is a Tree jike thOQuince-tree, of a thin *Bark, .*or with thin Leaves, (λεπέόφυλλον) and bearing a Emit of the  
Size of a Plum, but without a Stone, and called *Memacyilum,*of a deep-yellow or red Colour, when ripe.

The Fruit is very husky Fond, hurtful to the Stomach, and \  
causes Head-ach. *Diofccrides, Libati Cast. TyS. '*

This Tree grows very frequently in *Spain, Sicily, Italy,* and .  
*Narbrn* in *France. Juba* reports, that in *Arabia* it rises to the  
Height of fifty .Cubits, *Plin. L. tq. C.a.^. P. Bellenius* informs  
us, that in the Valleys of *Moicnt Athos,* so much celebrated by  
the Antients, the *Arbuti* grew up to Trees of a huge Size and  
Bulk. Throughout the Winter it retains the Verdure of its .  
Leaves, which are large, and whofe Edges are full of Points,  
and about the Middle of each Leaf there is a reddish Vein. It  
bears white and fragrant Flowers, which resemble Honey-  
suckle, or Lines of the Valley. After its Flowers, are fallen,,  
it bears' a round thick Emit as large as a Strawberry, which ia i  
at first green, then yellow, and, last of all, red, of a coarse,,  
bitter, and not very pungent Taste. Some call its Fruit Coegi  
*mar us,* and *Unede,* for this Reason probably, thav-oniy: one of ἰ  
them should be eaten at a time, according *to Pliny, Galen,,,  
Dioseorides,* and some others, assert, that the. Fruit, eaten in,  
too large a Quantity, is prejudicial to the Stomach, and excites  
Head-actis. For my share, fays *John Bauhine,* -they alwaysri  
occasioned a Pain in my Stomach when I happened th eat them.  
But *Car. Clustus* fays, he bad eaten many of them without sof-  
taming any manner of injury. *Lib. r. rar. Plant. Hisi. C. io.*Many distil a Water from its leaves'and Flowers in *Balnea  
Maria,* which they look upon as a mightv Preserimvc,against

the Plague,-especially if'usedToon enough. *: Amatus Lusitemus,*informs us, that it is a sacred Preservative and Antidote against  
the Plague and Poisons. \* *Matthiolus* mixes it with the Powder  
of Bone of *Stag's Hiart.* Many .also make use of its Root  
against the.Plague. . Tanners sse its LeaVes in preparing their;  
Leather; and Bird-catchers use its Seeds fur catching their Prey  
in the Winter-season. *Barth. Zorn. Botanolog. \_ \_*

ARCA *Arcanorum. T'heMcrcurius Philosophorum. Cast esu.  
las.* - : . ι ’ τ ... .

ARCANUM, ἀποῥῥατον, ἀπόκρυφον, μυστήριον.: A kind of  
Remedy whose Manner of Preparation, or- singular Efficacy, is  
industrioufly concealed, in order to enhance its Value.1 *Para..  
- celsus* describes it to he a principal Medium, which ought to he  
investigated by Experience. : .. . . .. , . t

**ARCANUM,** by the Chymists, 'is generally .defined a thing  
secret; incorporeal, and immortal, whichcannot .be known.by.  
Man, .unless by Experience; for it is the .Virtue.os every  
. thing, which operates a thousand times more than the thing

itself. Λ 2 i . . .. .τι- ' J ..C

The *Arcanum Materiale* is a specific Extract more nearly  
allied Io the Matter of the Body. But since the Matter of  
compound Bodies consists of two Elements, the *Moist* and the  
*Dry,* (for Air and Fine are rather the *Form,* andare to be consi-  
dered as Efficients) therefore this *Arcanum* must also he os two  
Kinds, that is, the *Aqua. Siillatitia,* and the *Coagulum Spies...  
stcum. , .so*i. I

The *Arcanum Specificum* is an Extract Of-the interior Na-  
ture, presenting us with the Substance of every thing in a  
nearer View, so that the Thing itself may he known in it ; .for.  
which Reason “we are to take the utmost Care, that the sub-  
stantial Crasis or Contexture he not spoiled, hecause in this re-  
spect it is called *Specific,:* and differs from,the *susinta Essentia,*which for its confummate. Schtilty, and exalted Rank, seems  
' almost to desert from its own to the superior Class of uEtherealS.

This *Arcanum Specificum* is of two Sorts, one more *formalgi*Which .is called the *Astral,* the other more *material. Rusun-  
dus.. .. ... .... .*

:. At present there .are. three remarkable Remedies, which pass  
under the specious Name of *Arcanums,* which are,

.n . S **ARCANUM CORALLINUMs**

' I. Take of red Precipitate, four Ounces; put it into A Re-  
tort ; add to it Spirit of Nitre, eight Ounces; set it in a  
Sand Furnace, find draw, off the Spirit by a gradual Heat  
raised to the fourth Degree. This Operation will be per-  
formed in five or fix Hours. Return that Spirit of Nitre  
with four Ounces of hew Spirit; and, at last, let it con-  
tinue at least two Hours, in the fourth Degree of Fire ;  
then let it all cool, and there will be a very red and sub-  
tile Powder, which put into a Crucible, and set in a Fire of

\* ' Charcoal, but not exceeding a Worm-red, half a Quarter  
of an Hour. Then put it into a Mattrass, and to it  
three Pounds of distilled Fountain or Rain-water ; set it in  
a Sand Furnace, and give it a gradual Fire till it boils,  
and so keep it half an Hour. Pour off that Water by In-  
clination, and dry the Powder gently; then put to it of  
tartarized Spirit of Wine, twelve Ounces; and in a gen-  
tle Heat draw it off, and so proceed to two Cohobations.  
Then put to it twelve Ounces of fresh tartarized Spirit of  
Wine; fit a Glass to the Mouth os the Cucurbit, to make  
it a Circulatory; let it stand in a gentle Heat of Sand  
forty-eight Hours ; and, at the last of all, let it simmer a  
Iittie, then let all cool: Decant the Spirin of Wine, and  
dry the Powder..; 4

This does not greatly differ froth the Prince’s Powder, Some  
esteem this the best and safest of this Trihe: It operates chiefly  
by Stool. Its Dose is from three to ten Grains. This is also  
reckoned good in the Gout, Dropsy, Scurvy, and Itch, as  
well as Venereal Infections.

**'2. ARCANUM DUPLEX, *sive* DUPLICATUM.**

Take any Quantity of the Caput Mortuum of Aqua-fortis,  
made with equal Parts of N itre and Vitriol, and diflolve in  
hot Water by standing some Hours, and now-and-then  
stirring the Mixture, Let the Water he filtred; evapo-  
rate to the Appearance of a Skin upomthe Surface, or even  
to a Dryness, and leave it to shoot. "

This is also in some Authors by the Name of *Nitrum Vitri.  
- elatum,* and *Sal Ducis Holfatiay* and is greatly extolled for a  
Dimetie, Sudorific, and, .as the Humours are disposed, some-  
times for a Cathartic too - hut we hardly ever meet with it in  
Prescription. Its Dose is from half a Scruple to half a Dram..

**3. ARCANUM JOvlALE.**

. Make an Amalgama with equal Quantities of Quicksilver  
and Tin: Powder it, and pour upon it Spirit of Nitre, till  
it somewhat more than covers it, which let. stand in a

; .gentle Digestinn for. some Honrs; then by a Retort thaw  
off the Spirit of Nitre. The remaining Matter take out,  
and wet it withSpirit of Wine rectified, which burn away.  
This repeat five or six times, until the pungent Taste is  
..worn Osh. , ... : - . Ἀ..

This is recommended in *Bateds* Dispensatory for a powerful  
Sudorific. Its Dose is from three to eight Grains. *spuirisus  
Dispenses. ' \_ sistas. ... ssssss '*

Y ARCEUTHOS. The sarheas JUNIPERUS, which see.

ARCHKEUS,' άρχάῖός, antient, former. \* Ἀρχαίη φύσις, in  
*Hippocrates,* often signifies the former healthy State of the Body  
hefore the Attack of a Disease. : '. Y \*  
.. ARCHAGATHI EMPLASTRUM LENE. /,A mollify-  
ing Plainer invented by *Archagathus,* Its Preparation is given  
*S-y Nessus,. Lib.* 5. *Cap.* I9.. . εἴ’ Ψ ; ’’ . εἴ ; Y

AR CH A GATH LS. A celebrated Physician amongst the  
*Ramans, ' susu ' .* ; '. .\*'.\*7 " ' '

Tis by dome asserted, that before the Arrival of *Archagathus*at *Rome,* Physic was not so much as known in thet City; and  
in we may believe *Pliny,* this useful Branch of Learning was  
unknown to the *Romans,* till after all the other liberal Arts and  
Sciences were established among them: " The *Roman* People,  
" says he, [ *Lib.* 29. *Cap.* I. ] were more than six hun-  
". died Years without Physicians, though they were very early  
" in cultivating the other Arts, and even send of *Physic* itself,  
" till, becoming acquainted with it by Experience, they con-  
" deinn’d it.- *Cassius Hemina* informs us, that *Archagathus*" the Son of *Lyfanids rsae Peloponnesian* was the first Physician  
' po who arrived at *Rome,* under' the Consulship of *Marcus An..*

*or ratius* and *Marcus Livius,* in the Year os the City 535.  
" adding, that he had the Freedom of the City hestowed upon  
a. him; and that the Public had, at their own Charges, pur-  
or chased a' Shop for him in the Street of *Accilius,* that he might  
" exercise his Profession to the greater Advantage; that at first  
" they *gave* him the Surname of *Vielnerarius, CstT.be Healer  
“of {Pounds*; that his Arrival was Very agreeable to the People,  
but that soon afters his Practices of *Burning* and *Cutting* ap-

\*" pearing cruel and barbarous in the Eyes os the People,, they . 5'  
or exchanged his former Surname Tor that more infamous one υ  
" of *Patienti oner*; from which time they conceived an impla-

\* " cable Aversion to *Physic* and all its Professors.''

It appears somewhat surprismg, that a People so polite as the  
*Romans* were, should he so long without Physicians. To  
the Authority of *PUny* we shall Oppose that of *Dionysius* of *Ha-  
licarnajsus,* who in his tenth Book has these Words: " The  
" Plague beginning to appear in *Rome* in the Year of the City  
“ 30I. find happening to rage more Violently than, any other  
" Plague with which they had been afflicted in the Memory  
'" of Man, it carried off almost all the Slaves, and half of the Ci-  
α tizens, the Physicians not heing aide to attend and take care  
*α os* such a large Number of Patients." There were then Phy-  
ficians in *Pome* at that time, that is, more than two hundred  
Years before the Period mentioned *lsyPliny,* as indeed therehaVe  
been Practisers of this Art in all Ages among all People. But,  
in order to reconcile these two Authors, we must suppose, that  
*Pliny* means only foreign Physicians, especially those of the  
*Greek* Nation ; and indeed he explains himself to that Purpose  
a little afterwards in these Words: " In order to be convinced  
‘‘of the Aversion the *Romans* in those Days here to Physic,  
we need only hear the Sentiments of *Marcus Cato* upon that  
" Point, who lived seventy Years aster *Archagathus,* and who  
‘‘ was a Man of whom we may say, that the Honour of a  
" Triumph decreed in his Favour, and the Dignity Os the  
" Censorship, which Office he here, are the least shining Parts  
" Of .his Character, fince so many other Circumstances eon-  
" currid in his Person to render him Venerable and awful.'\*  
These following are his own Words, taken from a Letter he  
wrote to his Son: " I will tell you, my Son *Marcus,* at a pro-  
" per Occasion, what Notion I entertain of these *Greeks,* and  
" whet! think most Valuable in *Athens.* It is not improper to  
" study their Learning and Sciences cursorily, hut 'tis by no  
" means necessary to make one's self a complete Master of It,  
" I shall say no more at present of thet wicked and arrogant  
" Race; but persuade yourself of this, as much aS if an Oracle .  
" had spoken it, that as soon as this Nation has communicated  
" her Learning to us, she will spoil and corrupt *Rome*; and  
" this dine Event will he still more easily brought about, if she  
" continue to send her Physicians to us. They have sworn  
\*\* among themselves to kill all the *Barbarians,* by means of  
their Art; and still they exact a Fee for their Pains from  
" the Patients with whom they deal, that they may gain their  
" Confidence more effectually, and consequently heve in in  
" their Power to destroy them with the less Danger of Suspi-  
" cion. They have such a Degree of Insolence aS to call pot  
" only other Nations, but us. *Barbarians-,* nay, they carry  
" their Arrogance farther, and style us *hortMi,* rude, and  
" Strangers to true Politeness. In a Word, my Son, re-  
" member, that I have discharged you from having anything.

\* \* to do with Physicians." t .

’Tis plain fitom the’ Stram Of Cino's Language, that he had  
only foreign Physic in his View ; and this *Pliny* acknowledges,  
by starting to htmself the following Objection, which he makes  
use of as a Conclusion: ’" Must wethen helieve, that *Cato* eon-  
" demn'da thingso useful and beneficial aS Physic ? Affiiredlynot;  
" fince he himself Vouchsafes to informs ns by the Use of whar  
" Medicines he himself and his Wife had arrived at such an  
" advanced Age; and that the had written a Bookpin which he  
" lays down the Method of his Practice, with regard to his Son,  
" his Slaves, and even his Cattle, when they were indis-  
" posed." . . ' ' ' t .

’ The *Ramans* then were not absolutely without Physicians  
in the earlier Ages os their Republic; but in all Probability,  
hefore the Arrival of *Archagathus,* they only used that *Natural  
Phasic,* or simple Empiricism, which we may well suppose to  
have heen practised by the infant World, when Men made thein  
first.Appeasance upon it.' This was the Physic relished by *Cato,*and on which he wrote the first of all the *Ramans.* He had  
some Peculiarities in his Practice, which, is they will nor inform  
the Judgment, will, at least, excite the Laughter osevery think,  
ing Person; for’tis well known, that he approved of supersti-  
tious Remedies; and in that Part of his Works which has  
reached our Hands, he has given us an illimitable *Formula* of  
Words to he pronounced for the Cure of a Diflocation or  
Fracture ; hut because there is not a Possibility of translating  
them, I shall give them as he himself gave them: " *Luxum si  
" quod est, hac Cautione fanum fiet. Harundinem prende tibi  
" viridem P.* 4s *aut* 5. *Longam. Mediam diffinde, et duo Hes  
" mines teneant ad Coccendices. Incipe Cantare in alce. S. F.  
" Motas vceta Daries Dardaries, Aflataries Disseenapiter, ufque  
" dum coeantc Ferrum insuper jactato. Ubi coicrint, et asa  
" tcra Alteram tetigerit , id Manu prende, et dextra sinistra  
" praecide. Ad Luxum aut Fracturam alliga, fanum fiet, et  
" tamen 'quotidie cantato in alio, S. P. vel Luxato, vel hoc  
“modo, huat, hanat, huat, ista. Pista, sista, demiabo darn-  
" naustraf et luxato. ' Vel hoc mode, huat, haut, haut, ista,  
€i sis tar sis ardamiabon dunnaustraP* Cato de re rustic Cap.  
I6o.

*Pliny* also informs us, that *Catst* in his Practice made a great  
deal of Use of Cabbage, in which, as he observes, the whose  
Materia Medica *of* the *Ramans* consisted for six hundred Years.  
This *Panacea* must undoubtedly appear ridiculous in our Days’;  
but we shall be less surprised, that this People confided so much  
in a common Plant, if we call to mind the uncommon Esteem  
in winch it was had among the most learned and skilful of the  
first *Greek* Physicians. ' ' ‘ ‘ .. ..

*Plutarch* observes, with regard to the Practice of *Cato,* that  
he did not approve of Abstinence for the Cure of Diseases, but  
recommended Heths, and the Flesh of Ducks, Pigeons, and  
Hares. But this Author does not pay so profound a Venera-  
tion to the Physic of *Cato as Pliny* does; he observes on **the**contrary, that the Wife 'and Son of that *Roman* died hefore  
himself; adding at the same time, that if *Cato* lived to so  
great an Age, it was owing to the natural Goofiness of his  
Constitution, and not the judicious and happy Choice of his  
Medicines. As *Plutarch* was a *Grecian,* he may possibly he  
suspected of being animated with too keen' a Desire Os  
revenging the Caufe of the *Grech* Physicians; though, at  
the same time, what’ he asserts has Very much **the** Ain of  
Probability.

AS for the Physic of the *Greeks,* \*tis not at all furprising,  
that the *Romans* should he unacquainted with it till the Arrival  
of *Archagathus* amongst them, since even in other Instances  
they were Very late in cultivating the Sciences and liberal Arts.  
And tho' *Pliny,* in the Passage already quoted, affirms, that  
the *Romans* soon received the Arts; yet this is only to he under-  
stood Of these mechanical Arts, which are absolutely necestary  
**to** human Life: " *Cicero [Tnsoulanar. squcnst. Lib.* I.] informs  
" us, that Poetry was not introduced among the *Romans* till  
" very late, and that even Philosophy had been in great Dis-  
" repute till his Days. ’ *Suetonius* also [De *illustrib. Grarnma-*" ίάστένί affirms, that Grammar was not at all in Use among  
" the first *Ramans,* much less was it esteemed and Valued, he-  
" cause the People of these Days were as yet savage and unpo-  
" lite, and so throughly addicted to the Bnfiness of War, that  
" none apply'd themselves very much to the liheralArts." But  
there cannot possibly he **a** more convincing Proof, that Learn-  
ing made her Entrance into *Rente very* late, than *Catgrs* Dread,  
lest she should make her Appearance in his Days, though he  
lived, as we have observed,’ seventy Years after *Archagathus.*Though the greater Part of this Article may seem to be a kind  
**of** Digression, yet, upon a closer View, the Whose will appear  
to have some Connection with the Life and History of  
*Archagathus.* Besides, 'tis fraught with so much Learn-  
ing, and has such a direct Tendency to acquaint us with the  
State of Physic, in *Fame,* that it will speak for its own *Propriety.  
Lor Chore. Hisistfrsi de Medicine.*

ARCHALTES, os, according to *Rulandus,* ARCHATES.  
By this Word *Paracelsus* means the Foundations or Pillars os  
**the Earth, hecaufe they do not seem to he sustained by one an-**

**other, tint by the secret and wonderful Operation Of Gods***Rulanaus. Castellus... : ...... ?*

i .ARCHANGELICA. See **ANGELICA.**

‘ ARCHE, ἀρχἤ» a Beginning, has a Multiplicity of Mean-s-  
ings among Physicians, according *to Galen.* Sometimes, says  
**he,.** it signifies the first Attack of a-Disease without any Length  
of Time at all; sometimes it means the same continued, tho’.  
but for a short Space. . Besides theseSignifications, ἀρχἤ denotes  
the first Stage of the Distemper, the second being the *Anabasis,  
deaSaatSy* (or Increase; the third the *Acme, desert,* " State or  
" Height;" and the last the *Paracme, oraegeucsm.* " Deesen-  
" sion.''. *Aetius* by *ffiae Arche of* a Distemper understands **the**Beginning Of the Patient's Decubiture.. Again, *Galen.* telis us,  
that *Hippocrates,* as well as other Physicians, use this Word **to**signify the Beginning of a periodical Distemper, on the first Day  
of the Transition from a healthy to a morbid State, which  
comes about again on the third or fifth Day in proportion to the  
Period : He says, moreover, that *Hippocrates,* and the antient  
Physicians, meant *len Arche,* a Space of Time in the Beginning,  
of a Disease which admitted of-Help, whether by Bleeding,  
Clysters, *etc.* and that the *Arche* in a Hectic Fever was. not  
circumscribed or limited by Days or Hours, as it was in other  
Distempers, but by the Quality of the Affection.. In this Sense  
*is Arche* taken by *Tully,* when he writes to his Friend *Atticus.,  
Auaatia. tua mint valde molesta y medere, amabo, dum est dofyfrt.*" I am Very much concern'd about your Difficulty or Urine 2.  
" let me beg you to get it cur'd while it is recent/'. : .

ARCHeGONOS, ἀρχήγιινοςγ from άρχἤ, a Beginning, and  
γίνομαι, to be, or he produc'd. Primigenia!. .so.

AiRCHENDA,-a Powder prepar'd of the Leaves Of the  
*Egyptian* Privet, called *Alcanna,* Or *Elhanna,* by the Natives,  
with which they plaster up their Feet after batheing, and won-  
derfully commend it against all Humidity, ill Smell, and Imhe-  
cillity of the Feet, on account of its astringent and strengthen-  
ing Quality. See **ALCANNA. -**

- ARCHEUSisa Tenn introduced by *Paracelsus,* and defined  
by his Interpreter to he an invisible Species, Vague, and sepa-  
rating itself from Bedies, the Physician's Power, herd Nature's  
Virtue. *Paracelsus* says Of it. That it is the Nature and Dis-  
poser of Things, *De Tartaro***; is the** Separator of the Elements,  
*De Elemento Aquae ,* .disposes and orders all Things in Nature,  
that every thing may he brought to the ultimate-Matter, of its  
Nature, I. *de Mineralibus y* is constituted to compound Things  
which ought to he united, *ibid.* and is the Destroyer of Bodies,  
*Chirurg,* that the Office of the *Archeus* in the Microcosm is to.  
separate the Pure from the Impure, heing the prime Operator  
in the Stomach, .that prepares and distributes whatever we eat  
and drink, and employs the expulsive Powers in discharging **the**tartareous Recrements by the Intestines and .Bladder; and as  
the *Archeus* of the Stomach is more or less perfect, so in propor-  
tion are the Separations of the Pure from the Impure, and of  
Consequence the Microcosm is more, or less subject to Disorders,  
*De Morbis Tartar,* that the great *Archeus* is the Distributor of  
the different Heats necestary for as many different Digestions  
according, to. **the** Nature of the Parts, *Modus Pharsnacandi,  
Fol.* I. *p.* 8I5. that there is a Virtue, in Nature which in the  
*Archeus,* that disposes .all things into their several Essences,  
separating one Thing from another, and furnishing Things with  
their proper Seeds, *Meteorum cap. A. Fol. 2. p. 2.02. .*

*Fan Helmont* makes Very frequent Use of this .Word, and in-  
forms us, that the *Archeus* consists in a Connection of the Vital  
Ain, as Matter, with the seminal Form, which is the interior  
spiritual Nucleus, containing the Foecundity of the Seed, and  
of which the visible Seed is but the Pod. This *Archens* is the  
Contriver and Director of Generation, investing itself with bo-  
dily Cloathing. -in-animate Beings it- perambulates all the ἰ  
Recesses of the Seed, and transforms the Matter, according to’  
the Entelecheia of its own Image, here placing the Hears, and "  
there the Brain; and to every Part assigning, out of its Uni-  
-versa} Monarchy, a Governor, according to its Exigency.and  
final Use, which remains in his Office till Death; but the  
Archeus is always fluctuating, and never fix'd to any Member,  
but keeps a watchful Eye over every particular Governor of a  
Part, and is always clear and lively, but never idle. *Archeus  
Fabcr.*

By these Extracts we may perceive, that these Philosophers  
only meant *Nature,* by their *Archeus.*

ARCHIATER.

The Word *Archiater* or *Archiatros* has different Ideas affixed  
to it by different Persons : Thus *Chasseaneus* imagin'd, that it  
imply'd no more than a *Portor or Door-keeper of the Princes,  
Palace,* as if one should say. *Princeps Acrii*; but this Conje-  
cture is so absurd, that it in a manner confines itself. *Aceursius*has succeeded hetter in translating the Word *Archiater, Prince  
or Ghees, of Physicians,* as if one should say ἀρχδς τῶν ἰατρῶν.

This Opinion of .durrutsiwwas embraced by the antient Trans-  
lators of *Galen,* and some other learned Men, who rendered  
the *Greek* Word *Archiater by* the *Latin* ones, *Medicus prima-  
rius. MereterialisMns* the first who declared himself against this  
Explication Of *Accunsiw,* and maintained that the Word *Arche..*

*ater* signified the *Physician of -the Prince,* as if one should fry, .  
Τοῦ αρχοντος ιατρός. He endeavours to support his Opinion by  
this Reason, that the Word *Archiatcr* was never used by any  
*Greek* or *Latin* Author before the Days of the *Reiman* Empe-  
rors. He even thinks, that this Word was not known till after  
the Reigns of *Tiberius* and *Claudius,* which is sufficiently  
proV'd by this Circumstance, that *Andeomaehus,* who lived un-  
der *Nero,* was the first who aflinn’d the Title of *Ar chia tor.*

That Title, says *Mercurialis,* was not in Use before **the**Days of the Emperors, because the Thing imported by it had  
Trot as yet a Being 5 or in other Words, there could not possibly  
*he Physicians tasftaeDmperors,* hefore the *Empcrors* themselves  
were established. This is oneTopic insisted upon by *Mcrcurialis,*in Defence of his Opinion ; to which some may possibly-reply,  
that the *Kings ess Sovereigns os* other Countries might have also  
given the Name of *Archiatroi* to their Physicians, if that.Word  
signifies the *Physician of the Prince.* But one may retort this  
Argument, and say,.’that if the Word *Archiater* signifies the  
*Prince or Chief of Physicians,* the *Greeks* would not, in all Pro-  
bability, have sail'd to bestow .that Tide upon *Hippocrates,  
Erasistratus,* and fome others of their most eminent Physicians.  
Let this he as it will, ’tis an uncontested Fact, that the *Archi-  
atroi Vfesc* not so much as heard of before the Days Of the Em-  
perors.

*Mercurialis* adduces two Arguments more in Confirmation  
of his own Hypothesis: The first is, that *Andeomaehus* is not  
called simply *Archiater,* without any Mark of Distinction, but  
the *Archiater* of *Nero.* The second is, that if *Demetrius* and  
*Magnus,* who are called *Archiatroi,* by the same Author who  
speaks of *Andrornachus,* and had that Title bestowed on them  
under the Reigns of the *Antonini,* had not heen the Physicians  
os these Emperors, then no Reason can be assigned, why they  
should have heen called *Archiatroi,* rather than *Archigenes,  
Soranus,* and several other Physicians, who flourish'd much  
about the same Time, and whose Names were sufficiently sa-  
Inous.

*Alciatus* embraces an Opinion, which seems to he a kind of  
*Medium* betwixt that of *Accursius* and *Mercurialis* ; for he ima-  
gin'd, that the *Archiater* was in Reality the *Prince of Physi-  
cians,'* because he was the *Physician of the Prince,* fince the Man  
who bears that Character, is, for that very Reason, placed, in  
.some measiire,.in a higher Sphere than other Physicians ; het  
. according to that lawyer, it does not thence follow, that the  
Word *Archiatros* is form'd of the *Greek* Words τῆ ἄρχου ιατροός..

Thefe are the three different Opinions embraced with regard  
**to** the Meaning of the Word *Archiater* ; for that of *Chafsuneus*is Of so trifling and diminutive a Nature, that it does not de-  
serve a Place among the rest. J know not whether *Alciatus* has  
had any Ahettors, hut the Bulk of the learned World in gene-  
**ral is** divided between the Explications of *Accursius* and *Mercu-  
rialis :* Each has his respective Champions, and those too Men  
of Learning. The Opinion of *Mercurialis is* supported by  
*Guyacius, Tsvyinger, Cafaubon, Martius,* and *Postius*; but not-  
withstanding the Authority os these great Men, *Meibomius* sa-  
- vours the Interpretation of *Accursius,* and adduces several Argu-  
ments in its Defence; the first of which is, that of all the seve-  
ral *Greek* Words which begin with *Archi,* such as *Architectus,  
Archiepiseapus, Architriclinus, Archilestes, Archiereus,* not one  
. denotes any thing pertaining or relating to the Prince, but  
that they all equally import something that is the*first or mast  
: excellent of its Kind.* Just so says *Meibomius,* the *Archiatcr* is  
not *the Physician of the Prince,* but *the Prince or Chief of Phy-  
'steians,* .otherwise this Word would he the only Exception from  
- the Rule now mentioned. *Cafaubon* had indeed pretended, that  
the Word ἀρχιγυβερνητης, in a certain Passage quoted by him,  
denoted *the Commandor of the Shop in which the King failed,* and  
not *the Commander of the whole Fleet.* But *Meibomius* confutes  
that learned Critic with a great deal of Solidity and Judgment.

The second Argument adduc'd by *Meibomius,* in order to  
prove, .that the *Archiatcr* was not the Physician of the Prince, is,  
that some Authors make mention of one *Theon,* and one *Glau-  
cus, Ar.chiatcrs* of *Alexandria,* and of. one *Cyrus, Archiatcr* os  
*Edejsia :* Now there were neither Kings nor Princes in these  
Cities, in the Times of these Archiaters. He draws another  
Proof from a Passage of *Oribasius,* where that Author says.  
*That the Empcror* Julian *had called together all the Archiatroi of  
the Country, and selected from.their Number seventy-two of thofe  
whom he thought most leaned, of which Number* Oribasius *him.,  
self was one* ; from which it follows, that the Archiatroi were  
very numerous, and dispersed thro\* all the Quarters of the Em-  
pire. But to this Argument *of Meibomius* it may be reply'd,  
that the Pastage on which 'tis built is not to he met with in the  
*- Greek* Copy of *Oribasius.* The fourth Argument adduced by  
**this** learned Physician is drawn from this, that *Galen,* or **the**Author of the Book intituled *De Therlaca,* when speaking, of  
*Andrornachus,* says. *That his Skill in Medicine was very exten-  
sive ; and that for that Reason the Emperor made Choice of hern  
isqusttv iatior, to preside ervcr us, that is, aver the Physicians ,* or,  
in other Words, to exercise the Office of *Archiatcr,* fince he  
had the Title of it bestow'd on him. The fifth Argument ad-

duc\*d hy *Meidurndus* in Defence of*Accursiuds* interpretation, is,  
that St. *Augustine* calls *AEs.culapius Archiatcr,* by which he  
undoubtedly meant no more than that he was the *Chiof of  
Physicians ;* and that St. *ferorn* gives the same Tide to the  
*Saviour of the lViorld,.* which is just as much as if he had called  
*Justus Christ* the*sovereign Physician. Meibomius* adds, that the  
Word *Archiatcr* is. translated *Proto-medicus,* by the impure **and**barbarous Writers of the *Catin* Language ; and says, that the  
Physicians of the Emperors were only simply call'd Physicians of  
*Cces.ar,* or some Emperor, as appears by some Inscriptions;  
and that they never assum’d the Title os *Archiatroi,* unless they  
helong’d to the Class of Physicians *so* call'd.

*Godofredus* on the other hand, favours the Opinion of *Mer-  
curialis,* with regard to the Etymology of the Word *Archiatcr.*But he observes, that there were two Sorts of *Archiatroi,* which  
*Mercurialis* had confounded with each other. The former Sort  
were called *Archiatroi S. Palatii,* and according to *Godofredus,*were only employed in the Emperor’s Court ; whereas the latter  
Sort were only called simply *Archiatri,* or *Archiatri Populares,*and served the People in the Cities of *Rorne* and *Constantinople*These latter, continues this Author, were, aS well as the for-  
mer, called *Archiatri,* from the Citv in which they practised,  
just as if one should say *Principis Crisis Medici,* that is, the  
Physicians of the principal City, or of the City in which the  
Prince resides. The *Archiatri* os this last Sort were fourteen in  
-Numher, one for each of the Districts into which *Ratine* was  
then divided. And as they had Salaries allowed them by the  
Public, and enjoyed several other Privileges and Immunities,  
which could not be claimed by other Subjects, they were obliged  
to visit all sick Persons without Distinction, *gratis*; for the  
original End and Design of their Establishment was to guard  
against the Losies, which the poorer Sort of the *Roman* Subjects.  
might possibly.sustain for want of Physicians. v :

All we know concerning the Salaries, the Privileges, and the  
Method of electing the *Archiatri,* is drawn from the several  
Laws relating to thefe Matters enacted by different Emperors,  
and from the Works of some Authors who lived at that Time;  
first then, from these Sources we find, that these *Archiatri* had  
Salaries either from the Prince or the People; and, that in  
Consequence of these Salaries, they were obliged to visit all  
Patients, whether rich or poor, without demanding any Fees,  
except what the Patient's Generosity should prompt him to  
bestow aster his Cure was completed. Secondly, from these  
. Laws it appears, that several Privileges were annexed to the  
Office of *Archiater.^* that these Physicians themselves, their  
Wives and Children, were exempted from all the Taxes and  
Burdens of the *Roman* State; that such of them aS resided in  
the Provinces, were neither obliged- to quarter Soldiers, nor  
any other Persons whatever; that they could not he dragged to  
- the Bar, nor obliged to make a personal Appearance before the  
Judge ; that they could not be taken Prisoners ; and that none  
durst insult them without incurring the strictest and severest PeK  
nalties. The Law indeed which ordains this, feems to extend  
these Privileges, and render them common to all the Physicians  
of the *Roman* State, or at least to some who were not among  
the Numher of the *Archiatri.* But there is also another Law  
restraining these Privileges solely to the *Archiatri* os the *Palace,*and those of the City of *Pome.* Thirdly, from these Laws we  
may also gather, that the *Archiatri* served both the Emperors  
and the Public ; and that those of them who were discharg'd,  
either on account Of their having bore the Office during the  
allotted Time, or for some other Reason, were call'd *EXur-  
ehiatri,* or *Ex Archiatris.* Finally from these Laws, and the  
Writings of the Authors who liv'd in these Days, it appears,  
that there was a College os *Archiatri* composed os a certain  
Numher of Physicians, who took their respective Places, ac-  
cording to the Dates of their Admission ; so that when any of  
their Number died, the Person chosen to succeed him was lowest  
of all ; and that this College judg'd of the Capacity of Can\*  
didates, and chose or rejected them accordingly ; but that the .  
Emperor confirm'd them after they were elected, or even nomi-  
nated and proposed them before, to the *Archiatri*; who aster-  
wards examin’d them, and admitted them into their Number,  
if their Merit gave them a Title to that Honour.

*Trae Archiatri* of the Palace were honoured with a Tide some.,  
what equivalent to our Word *Earl.* This Earlship, *Comitivaj*as the *Romans* call'd it, was distinguish'd into thesinst and *second*Ranks, both winch were obtain'd by the *Archiatri* of the Palaces  
Thofe who obtain'd *roe Comitiva* of the *first Order,* went equal  
with *Dukes* and *Vicars* j and, it feems, thefe Dignities were at  
first common to several *Archiatri,* or that there were several of  
thefe Earls at one and the same time. But, under the *Gothic*Kings, a Revolution happen'd in this Body of Men; and instead  
of several *Archiatri,* there was one establish’d, who had a cer-  
tain Jurisdiction not only over the rest, bat also over the other -  
Physicians of the State. The Power os this *Earl* of the *Archi-  
atri* was very extensive, as we may leam from a- Clause os the  
*Formula* of his Instalment, which runs thus: " Henceforth  
" we confer upon you the Dignity of Earl of the *Archiatri,*" that you alone may shine distinguish'd among the venerable

*" Guardians csi* Health; and that all who shall have any Dihe  
" serences or Disputes, relating to Things of a medicinal Na-  
" ture, may submit to your Arbitration, and acquiesce in your  
" Decision .. You shall be the universal *Arbitcr* os the sacred  
" Art os Physic, and the Judge of all those Controversies winch  
" were formerly decided hy the Caprice of private Physicians.  
" You will, in some Sense, cure the Sick, inasmuch as yon  
" will put an End to those Contests which embroil Physic, and  
" consequently prove injurious to them: It is a remarkable  
" Piece of Honour, thet Men of Learning and Skill should  
" pay a sincere Deference to your Decisions ; and that you  
" should have so rich a Tribute os Veneration from those, who  
" are themselves venerable in theEyes os the rest of Mankind.’\*  
The same *Formula* subjoins, that this Head or Chief of the  
Physicians was particularly oblig'd to take care of the Emperor's  
Health ; and that, for this Very Reason, he had free Access to  
his Person at all Times. See *Cajsiodari Formal. Archiatr. Le  
Glerc. “ -*

I can't, upon this Occasion, forbear instituting the Compa-  
rison between the *Pope* and this Head of the *Archiatri*; only I  
look upon the latter as the more *noxious Animal* of the two: For  
the Infallibility and decisive Power of the former generally  
exert themselves upon Modes of Worship, and controverted  
Points os Divinity ; things in which the true and genuine Hap-  
piness os Adankind is by no means interested : Whereas the irre-  
vocable Decisions of the latter might tie the Practitioners of Phy-  
sic down to Theories and Practices, which might depopulate  
Cities, lay waste Nations, and, in Process of Time, render the  
Earth itself a Desart. Thus, for instance, if this Pope in  
Physic should decree, that every Physician should believe, that  
Fevers are caused by *an Inflammation of the Animal Spirits,* or  
*from something deleterious residing amongst them*; and, in. con-  
sequence of this Doctrine, should ordain, that, in such Cases,  
Patients should be deny'd all cooling and diluting Liquors; and  
should be kept to a constant Use of heating Medicines, in order  
to expel this *imaginary Poison,* or drive out this *inflammatory  
Mattcr* by the Pores of the Skin ; in this Case, Physic could no  
longer be esteem'd a salutary Art, since more must necessarily  
pertsh by such intended Means of Relief, than by all the Distem-  
pers which are naturally produced in the World. ’

This Word *Archiater* has made such a Noise in Physio, that  
is I was to give an Account of every thing that has been said  
relating to it, I should present the World with several Volumes  
...of critical, classical, and historical Learning : But that not be-  
' ing my Design, I hope I have fix'd the Meaning os the Word  
*Archeater,* and given as satisfactory an Account of the *Archiatri*as my intended Brevity would permit.

ARCHIDOXA. The Tide of a Chymical Work *as Para-  
celsus,* winch *Libavius* explains *magical. Castellus.*

ARCHIGENES. A celebrated Physician among the .An-  
tients.

We are inform'd by *Saidas,* that *Archegenes* lived under the  
Emperor *Trayan,* practised Physic at *Rome,* and died in the  
sixty-thud Year os inis Age, after having written a great deal on  
physical and medicinal Subjects. The same Author adds, that  
he was a Native os *Apamea in Syria,* and that his Father's  
Name was *Philip* ; which may possibly have laid a Foundation  
for the Mistake of *Wolfgangus Justussnakes Archigenes*Physician to *Philip* King of *Syria.* ν

But *Archigenes* must have not only lived under, but also fur-  
yived *Adrian,* if it was he who directed that emperor to a cer-  
tain Place under his Breast, as most proper to he wounded, in  
Order to procure a speedy Death. *Dion Cassius,* indeed, ascribes’  
this Affair to one *Hermogenes*; but *Mercurialis* is of Opinion,  
that the Name ought to be read *Archigenes,* and not *Hernia-  
genesi* However, I don't know but *Mercurialis* may he mis-  
taken in this; *for we* read of one *Hermogenes, a.* Follower of :*Erasistratus,* and there is nothing to hinder his living in the  
Days of *Adrian,* fince the Sect or School of *Erasistratus* was in  
Being till a great while after that Time. It also appears, that  
*Galen* speaks os this same *Hermogenes,* as of one who had not  
lived a great while before him. Now *Galen* was hern under  
the Emperor *Adrian.* AS for that other *Hermogenes,* against  
whom *Lucilius* made this Epigram, he must have been consi-  
derably older.

Ἔρμογένην «τ ιατρὶν ίδών Διοφαντος ἐν ὓπνοις,  
Όυκέτ ἀνηγέρθη, καὶ περίαμμαφέρων.

That is:

Diophantes, *happening to see the Physician* Hermogenes *in a .***DREAM,** *never awaked aftcr-, even thd he wore a* **PRESER- .  
VATIVE** *about him.*

*Martial,* who imitated this Epigram, attributes the same  
destructive influence to another Physician, whom he cash *Her- .  
mocrates* ; but this, as well as the former Name, may possibly  
he fictitious. *Martial's* Performance, the\* far short of the  
Spirit and Pungency of that of *Lucilius,* has nevertheless enough  
of the *Epigram* aheut it to deserve the Name of a masterly Pro-  
duction. It runs thus: " -

*Lotus nobisuum est hilaris, canavit et idem ; ’  
Inventus mane est mortuus Andragoras.*

*Torn fubitee mortis caufajn, Faustina, requires  
Lrrsomnis.medicum viderat Hermoeratem..*

*Andraeioiassupp’d in good Hialth; bus next Morning was found  
dead. If,* Faustinus, *you suould asek the Cause ofssi sudden a  
Death, I tell you, he had the Misfortune to fee.* Hermocrates *in  
a Dream. .*

' . ‘ \* Τ - . .

But to return to *Archigenes \* he must certainly be the Physi-  
cian meant by *Juvenal, Sat. 6. l.* 236. in these Words:

s *Tune corpore fano* . ss .ί ,  
*Advocat Archigene», onerosuq, pallia jactat  
ssuot Themison AEgras. —.*

From which Passage the Scholiast, observes, that *Archigenes* was  
a Very noted Physician of these Days.

And again, *Sat.* I3. *l.* 98.

*Nec dubitet* Ladas, *si non eget Anticyra, rtec*

Archigene. .;....

And in *Sat.* I4. *l. TL.*

*Ocyus Archigenem quarti, atssi, eme quad Mithridates  
Composuit. — . . ..*

Now as *Jwvenal* lived till the twelfth Year of *Adoriatis* Reign,  
he must have heen contemporary with *Archigenes*; and the  
Manner in which he speaks of him, imports, that he was a Phy-  
fician of great Employment.

But *fwvenal* is not the only Author who establishes the Cha-  
racter and Reputation *of Archigenes :* He *has Galen* also on his  
Side, whose Suffrage is of the more importance, as he himself  
was a Physician, and not Very profuse of his Encomiums on  
People who differ'd from his own Sentiments. *" Archigenes,*iC says he, [ *De Loeis Affect. Lib. 2. Cap. 6.* J has taught as  
" well, and with as much Care, as any other, all that relates  
" to the Art os Physic ; and this renders all his Writings,  
" which are very numerous, justly Valuable. But notwith-  
" standing this, he is not, in every respect, free from Errors ;  
" and as he did not hesitate to censure those who went before  
" him, even tho' he received a great deal os Advantage by their  
" Labours ; so we hope none will take it amiss, if we, who  
" come aster him, treat him as he treated others. It is Very  
" difficult, continues *Galen,* for Men not to err on certain  
" Occasions, either by heing entirely ignorant os certain things,  
’" or hy not judging os them as we ought; or by writing some-  
\*ς times in a too negligent and less accurate manner."

It appears somewhat contradictory, that *Archigenes* should  
be rank'd among the *Elective,* and among the Pneumatic  
Sect, at one and the same time ; but to this I answer, that if  
*Archegenes* is rank'd among the Pneumatics, or is he '(embraces  
the Sentiments of *Athenaeus,* this does not hinder him from  
’ being at Liberty to chuse whet he thought hest, from among the  
other Sects. And tho' he, perhaps, acknowledged the same  
Causes of Diseases with’the Dogmatic and Pneumatic Sects, yet  
\*tis possible, thet to these Causes he may have join'd that which  
the Pneumatics thought Of the greatest Importance, which is  
their *Spirit*; and might, for this Reason, have been inroll'd in  
the Pneumatic Sect However this he, the Author of the intro-  
duction places *Archigenes* not only in the Elective, but also in  
the Pneumatic Sect; and *Galen* himself, who no-where speaks  
of the former of these Sects, observes, that *Archigenes* was of  
the same Sect with *Athenaus,* who was a Pneumatic. *Le Clenc  
Histoire de la Medicine.*

\* ARCHIGENI MORBL Acute Diseases, so call'd from  
ἀρχῆ, the Chief, and γίνομαι, to he; because they hold the  
principal Rank among Diseases. *Blancard.*

ARCHIMAGIA. Chymistry, winch, heing the Art of  
making Gold and Silver, deserves this high Title. *Castellus..*

ARCHIMEDIS TRISPASTUM. The same as APEL-  
**LIDIS TRISPASTUM, which** see.

ARCHIMIA differs from *Alchimia,* heing, in particular, the  
Art of changing imperfect Metals into those which are more  
perfect. *Castellus.*

ARCHOS, ἀρχός. The Anus. It is also taken for the  
*Intestinum Pactum,* as if it were the primary or chief Intestine.  
Thus, *Apia.* 58. *Lib.* 5. *et Lib. de Fistulis, deyscs lpinseppliaivcev,*means an Inflammation of the *Intestinum Rectum,* according to  
that Exposition of *Galen,* ἀρχὸν μέν κν λέγων τὸ ολον ιάπευθυσ-  
μένον, " calling the whole *Intestinum Rectum* by the Name of  
*" Archos.''* And, *Lib. de Art.* by ἀρχου τὸ χαλαράν, " the  
" Laxity of the *Rectumso* is understood the lax Part, which  
adheres to the *Os Sacrum,* excluding the Constrictory Muscle  
call'd the *Sphincter*; and the same is meant, in *Eib. de Moch..*by *es7A* Τδ ἐγκεκλιμένον, " the inclining Part of the *Rectum.”*

ARCION, αρκβον. The Burdock. SeeBARDANA.

ARCOS. Burnt Copper. ***Edolandus. '***

ARCTATIO, ξυμ- or συμπέληρτς, from ξυμ- or συμπελευω,  
Οζπἐλας, near. A Streightness ;in particular, it is apply'd to the  
Intestines constipated from an Inflammation, and to a preter-  
natural Streightness of the ***Muliebre Pudendum,*** or ***Utcrus.*** It is  
also call'd ***Arctitudo.***

***Arctatu Pars,*** in ***Scribonius Largus,*** No. 206. is an Expres-  
sion to signify the Part compress'd or closed by a Fibula.

ARCTION, ἄρκτιον. Woolly-headed Burdock. See BAR-

**DANA. ‘ —**

ARCTOS. The Constellation call'd the **URSA MAjoR.**

ARCTOSCORDON, ἀρκτόσκορδον,- from ἄριίτος, a Bear,  
and σκόραδον, Garlick. A sort of Garlick call'd Bear-garlick.

AR CT OST APHYLOS, ἀρκτοστάφυλος, . from ἄρντ ος, and  
σταφήλη, a Grape. ***Uva Ursi,*** or ***Spanish*** WhortIes. See VAc-  
ciNiUM. . . .

ARCTURUS, ἀρκτῦρος, from ἄράτος, and ουρος, a Keeper,  
***in Erotian*** upon ***Hippocrates*** is expounded,vOFTivif‘Αράτοφήλακα  
Ηροσαγορεήκοτν, κροι γὰρ ***os quiKctr.es*** καλοίέντατ ἔστι δέ ήτος λαμ-  
πρὸς ἀστὴρ ἐν τῇ ζώνου σίν Εοώτιοκεἴμενος. " Which some call Ar-  
" ctophylax, (the Keeper os the Bear) for Keepers are call'd  
***" Uri:*** It is a bright Star in ***Bootes’s*** Belt.'' \* ***Hippocr. Lib.*** I.  
***Epidem.*** Πρὶἀρκτοήρου ὸλίγον, καὶ ἐπ ἀρκτουρου, ***etc.*** ." A littie be-  
" fore, and at the (Heliacal) Rising of ***Arcturus,\* See.***

Others derive the Word from άρκτος, and οῦρῆ,μTail; and  
make ***Arcturus*** a Star in the Tail of the great Bear, of which  
***Aratus,*** as tranflated by ***Tully:***

***Haic autejn fubter Praccrdia fixa videtur  
Stella micans radiis Arcturus nomine claro.***

***Arcturus*** rises about our second of ***September,*** and sets ***Octo-  
ber*** the twenty-ninth, as mark'd in the Calendar. .

ARCTURUS ***Creticus Belli:*** See **BLATTARIA.** ...;ι’  
ARCUALIA OSSA, according to some, are the Bones of  
the ***Sinciput*** ; others take them for the Temple-bones.

***Arcualis Sutura*** is the same as the ***Coronalis. .*** See SUTURA.

ARCUATIO, according to some, is a Gibbosity of the  
Fore-parts, with a Curvation of the Bones of the ***Sternum.  
Castellus.***

ARCUATUS MORBUS. The same as ***Arquattis Morbus,'***or ICTERUS, which see.

ARCULAE, ποελίδες-. The Caverns in which the Eyes are  
situated. ***Ruso Eephes.***

ARDABAR. A Species of. ***Arum.*** See ARUM.

ARDAS, ARDALOS, ἄρδας, ἄρδαλος, according to ***Galen'***and ***Erotian,*** are the same aS ῥήπος and μολυσμός ; that is. Sordes '  
and Filth. . ..."

- ARDEA, Offic. Schred. ***5. 3I5. Ardea cincrea,*** Met. Pm.  
I8I. ***Pella et Ardea,*** Bellon, des Oyfe, I9o. ***Ardea cincrea  
major.*** Ran Synop. A. 98. Aldrov. Ornith. 3. 377- Charlt.  
Exer. I09. Jonsi de Avin. ΙΟ3.' ***Ardea pulla flue cincrea,***Gesm de AVib. I86. ***Ardea cinerea flue pulla.*** Ran Ornith. i  
277. Will. Ornish. 2o3' THE HERON. -

: This Bind is too well known to require a Description. The  
Fat is recommended for asswaging the Pains of the Gout; for  
taking off Specks from the Eye,. and clearing the Sight ; and:  
for curing Deafness, if putintothe Ear. ***Dale, st***

The young Herons are sometimes used as Food; but on'  
account of their Aliment, winch is Fish, their Salts must be  
highly exalted, and their Flesh rank." . ;

ARDEA STELLARIS. - -- τε -

***Astcrias,*** Offic. ***Ardea Stellaris,*** Mer.Pin. 18 I. Will. Ornith.  
207. Ran Ornith. 282. Ejufd. Synop. A. Ioo. Charlt. Exer?  
**I** Io. ***Ardea stellaris mayor,*** Aldrov. Ornith. 3. 4o8. Gesm de  
AVib. I93. Jonf.de Avin. ΙΟ4. ***But or,*** Bellon, des Oyse. Io2S  
THE BITTERN, or MIRE-DRUM.

The Skin and Feathers, of this Bind, if burnt, are said ***to***stop Haemorrhages. . . ss .- .-

These Birds are sometimes eaten; but the Flesh is very sank,  
and their Salts must he much exalted on account of their Food. -

ARDENS FEBRXS, froth ***ardeo,*** to burn. A burning Fe-  
ver. The same aS CAUSUS, which see. I..:; "\*

ARDENTIA, are Thingy unfit to be eaten ordrank, heing  
of a Nature obnoxious to Combustion, as Carahe. ***frdrnbcrse***Turpentine, Jet, and the like. ***Rulandus.***

. ARDESIA. ***Hardesia vulgaris, Jiue Ardesia,*** Ind. Med. 57,  
***Lapides scissiles, et crustosi.*** Met. Pin. 2I2. SLATES. :

I do not know why ***Dale*** has inserted these among the ***Mate-  
ria Medica,*** . as, he says, he finds - no Virtues attributed to  
them. .' i . .in si..' t . sse-

ARDOR. URINAL See DYSURIA. ' . -- .

ARe-ALU. \_ A ***sortfof Indian*** Fig. ' See FicUs.f : ...r  
AREA, according to ***Rulandus,*** is the Mass dug from the

Mines, ***or*** the Place whence itts digg’d.. In 'Medicine it is A  
Species of ALOPECIA, which see. . ρὶοῦ -

ARECA; THE INDIAN NUT, Offic. ***Arecasive Fa\*-  
fel,*** THE-DRUNKEN DATE-TREE, Get. ***Siue Faufel  
avellana Indiana versicolor,*** THE DISCOLOUR'D SMALL  
^INDIAN NUT, Park. L.:.'.; -

I This is the Emit of a kind os Palm-tree, that grows in the  
***East-Indies.*** The outward Coat, or Covering, is about the  
Bigness, and Shape of a Pullet's Egg, and is made up of nume-  
rous fine Threads or Filaments, running lengthways from the  
Stalk to the Head ; under which is contain'd the Fruit or Nut,  
of a brown Colour on the Outside, in Shape like a Nutmeg at  
one End, but flatfish at the other, with a kind of Navel towards  
one Side ; within,.it is white, and marbled like a Nutmeg, with  
purplish Veins of very littie Taste.

. This Fruit is a kind of Cocoa-nut, containing a woody Ker-  
nel, inclosed by two different Substances. The ***Indians*** chew  
***ila&Areca,*** roll'd up in a Bitel-leaf, to help Digestion, and to  
strengthen the Gums, as ***Kampfer*** relates. When fresh, it is a  
little astringent ;. and of Ilus FruIt.the Extract is made, winch  
in our Shops is call'd ***Terra Japonica.*** To this extract they  
sometimes join that of another Plant named ***Lycium,*** and also  
calcin'd Shells. ***-Geoffroy.*** See CATECHU.

ARETACTIO, ξηρωοίς. An Exsiccation,, or Drying. It  
is. a way os preparing such Medicines as are redundant in-  
Moisture, in order to their being reduced to a Powder.  
***Castellus. . - . ' iso***

AREMAROS, Cinnabar. ***Palandus.***

ι .ARENA MARIS, Offic. ***Arena marina,*** Kentm. 57. ***Are.,  
na litoralis.*** Met. Pin. 2II. Match. Ι39Ο. SEA-SAND.

.Sea—sand dries up the redundant Moisture in Hydropic Confli-  
turions, if the Patient lies cover'd with it aS far aS the Head. It  
is sometimes heated, and applied by way of dry Fomentation,  
instead of Salt or Millet. ***Dioseorides, Lib. %. Cap.*** I 67.

. ARENAMEN, ARENARMEs, Bole Armenian. ***Rulandgi  
Juhnson. - . . .***

ARENARIA.: Ἀ Species of***Coronopus,se*** call'd, because it  
delights in sandur Places. ***Βlaneard.***

...AReNATIO, or SABURRATIO, is casting Plenty of Very,  
het Sea-sand, or, for want thereof, os River-sand, upon the  
Bodies of the Patients. ***Castellus.***

st AREOLA is the Circle surrounding the Nipple. See.  
MAMMAE. . . ' - ἔ' ' . ; '

i ARES. A Word coin’d by ***Paracelsus,*** by which he would have  
us understand the secret Disposer of Nature in the three Prin- .  
ciples, whereof every thing consists, who gives it a Form, Spe-  
ctes, and Substance, peculiar to it, whereby it is distinguish'd,  
from others. . We may here observe, say the Alchemists, the .  
Difference between these three Things, which the Divinity has  
Constituted in Nature. The ***Iliasies*** is a Substance of the most,  
general Kind, consisting' in the first universal Matter of all  
Things: The ***Archeus,*** the first Disposer of Nature, distributes  
this Matter into three Kinds, which are Sulphur, Mercury,  
and Salt,'and thence-reduces all Things into their Species. At  
last comes theaherr, another Disposer of Nature, and produces  
Forms to every Kind, and distributes Species into individuals.  
***Johnson.*** . j

***Ares*** is distinguish'd by ***Paracelsus*** into the ***Archeic,*** which is  
natural, and the ***Chymic,*** which is artificial. Hither also may  
he referr'd the ***Melosinscum,*** the Principle of Transmutation,  
call'd also the ***Salamandrine Essence,*** such as is ascrib'd to the  
Philosopher's Stone. ***Paracels., de Vit. Long. Lib.*** 3. ***Cap.*** I2.  
and- ***Lib.*** 4. ***Cap. 6. ........***

- ARESTA BOVIS. The same as ANONiS, which see.

.ARET jEUS.. ***LdClcrc,*** an Author of profound Learning,  
and singular Penetration, has set the Sentiments and Character  
***Cs Aretaus*** in a Very just'Light. /

***. Aretceus*** is an Author of so uncommon'a Character and Re-  
putation,- that we should do a manifest Injury heth to him and"  
to the World, if, on this Occasion,-we should neglect to inquire  
into the Sect to which he belong'd, and tlieTime at which he  
lived; and this Talk will at once prove curious and useful,  
fince,- as we go -along, we shall have Occasion to mention pome  
Circumstances, that place the Sentiments and Practice of  
***Aretceus*** in a clearer Light, than possibly most People are able  
to View them in without this Assistance.

t AS to the Sect,: then, to which this Physician helonged, there  
is not-perhaps a fingle Point in the whole History of Physic,  
that, has been either- more mistaken, or less adverted to; for  
***Castellanus,*** who1 writes a small Abridgment of the Lives of  
the antient'Physicians, exprefly affirms, that ***Aretaus*** .was at-  
tached to no particular Sect whatever;; Something more accu-  
rate and explicit might have been expected from ***Henischeus,*** a  
Physician of ***Auflnerg,*** who wrote Commentaries upon ***Aretaus-,***but he declares himself os the same Opinion with ***Castellanus,***and all along discovers such a Fund of Prejudice and Partiality,  
that-one would he tempted to think he had written his Commen-  
taries with no other View than to misrepresent ***Aretaus,*** and  
make him say things he never so much aS thought of. Instead  
of explaining the difficult Passages of his Author, he endeavours  
to: supply the Defects of the T ext in such a manner as to speak  
his own or ***Galents*** Sentiments, and not those of ***Aretaus.*** And,  
what is still more surprising, ***Hieronsinus Mercurialis,*** who was  
so throughly acquainted with the Writings ***os*** the antient Phy-  
fidians, and who had undoubtedly read ***Aretceus,*** aS appears from  
several Passages in - his -Worlts, forgets to take N otice of the

Scot to which this Physician belonged. But notwithstanding  
the Uncertainty this Point has hitherto laboured under, I shall  
venture to pronounce, that *Aretaus* was an Ahettor of the  
Pneumatic Soft; arid, my Reasons for thinking so, are thefe :

’Tis well known, that the Pneumatic Sect established a fifth  
Element, which they ceded *Spirit,* the Changes and Altera-  
tions os which, according to them, laid the Foundations of  
various Discases. Now ’tis plain, that *Aretaus* means this *same  
Spirit,* when he says, that " there are two Sorts of Quiofeys,  
" the one caused by an Inflammation of the Instruments os  
" .Respiration, os the Amygdalae, Epiglottis, Pharynx, Uvula,  
" and superior Part of the Aspera Arteria; and the other pro-  
" ceeding from a Disorder os the *Spirit,* which is itself the im-  
" mediate Cause of this Distemper. In the fatter of these  
" Quinseys, adds our Author, the Instruments of Respiration  
“ are so far from heing distended, that they are rather more  
" contracted than in their natural State; and yet the Suffoca-  
“ tion and Difficulty of Breathing are far greater than in the  
“ former , for which Reason, those who labour under it, irna-  
“ gine that they have a latent Inflammation in the very Mid-  
" dle of their Lungs, and in the Parts adjacent to their Heart.  
\*\* As for my share, continues he, I am of Opinion, that it is  
“ the Spirit alone which is assefted, and which by an unhappy  
" Change is hecome very hot and dry, hut that there is no  
“ Phlegmon or Inflammation in any Part whatever.” *Aretaus*confirms his Opinion, by an Example drawn from the Exha-  
lations which arise from the *Charonian Pits,* which in a Mo-  
. ment suffocate these who are exposed to them, though they  
should happen to be in a State of perfeci Health immediately  
before. He also confirms it by an Instance drawn from the  
Breath of mad Dogs, which, as he affirms, kills those who  
receive it, though they have not heen bit by the Dogs them-  
selves. From there Examples he concludes, " That a Change,  
“ with regard to Respiration, may be produced by internal  
" Causes, which bean an Analogy and Resemblance to filch as

are externalthat, in like manner, there are sometimes Hu-  
" ninurs in oiir Bodies, which partake of the Nature of Poi-  
“ sons, as much as external Substances which come under that  
" Denomination; and that we may observe natural Distem-  
“ pcrs accompanied with the same Symptoms as those produced  
" by. Poisons; and Patients vomit the same kind of Matter in,  
“ Fevers, which others do upon taking Polsons: For which  
" Reason, continues our Anther, we ought not to he fur-  
«\* prised, if the *Athenians,* who were ignorant of the Analogy,  
" hetween the Effects of certain Poisons, and those of certain,  
" pestilential Diseases, imagined that they were afflicted with  
" Distempers of that Nature, because the Inhabitants of the;  
*" Peloponnesus,* with whom they were at War, had poisoned  
" the Wells of the *Piraeus.” ......r. i. i*

*From these Passages we* may infer, that by the Word *Spirit,  
Aretaus* meant no more than the *Matter of Pofpiration,* and  
he seems to confirm that Point in another Passage, where he'  
says, that *the Coldness and Hamidity of the Spirit are the Cause-  
of an Asthma :* But it is not in these Cases alone, according to  
*Aretaus,* that the *Spirit* contributes to the Production of Dis-,  
eases; for the *Iliac Passeon* is, in his Opinion, produced by a  
cold and flow *Spirit,* which cannot easily discharge itself either,  
upwards or downwards, in a Scirrhus of the Spleen, the Belly,  
says he, is silled with a thick and dark *Spirit,* which seems to  
he humid, though it is not really *so.* in a Dropsy called a-  
*Tympanites,* our Author acknowledges a *Spirit* which does not:  
change its Situation, though the Partu which ineludes. it,  
moves upwards and downwards; and adds, that if this Spirit is-  
- changed into Water or Vapour, the Tympanites is changed  
into an Asoites. He asserts in another Passage, that .the Smell,  
or Vapour of the Poppy thickens the dry and subtile *Spirit of*PhreneticTatients. In short, *Aretaus.* insists so much on the  
*Spirit* established as a fifth Element by the Pneumatics, that  
we have no Reason to doubt of his being .a professed Abettor, of  
thatSecti .so....:.:::..

And even though this-should he denied, a. great, many, other  
Circumstances concur to prove, that *Aretaus* was a real Pnesse  
matin ; for ’tis past all Dispute, that the Physicians, of that. SeA  
asserted, that Fire, Air, Earth, and Water, were norteal  
Elements ; but that the Name of Element rather .belonged to  
the Qualities of which thefe Bodies were poilessed, or to Heat,  
Cold, Drynefs, and Humidity ; Now, *stcozAretaus* wwoftht  
fame Sentiment, is plain from a great N umber of Paissagesin his  
Work5. - .o..

It must he own’d, that in some Cases the Sentiments of *Art-,  
.taeus* coincided with those.of the Methodic Soft;.for though  
other Physicians acknowledged a Difference hetween acuto arid  
chronical Disorders, yet those of the Methodic Seol first wrote  
of them separately and apart: Now, that *Aretaus* followed them  
in this Particular, is plain from his having written sour Books  
upon acute, and as many upon chronical Distempers. ". . d

This is not the only Point in which he seems to follow them;  
for, in Imitation of them, he gives very particular Directions  
with regard to the Chamber in which Patients, labouring under  
certain Disorders, should be lodged. He likewise specifies the

Air. the Panent ought to breathe, the Bed on which he should  
lie, -and the Manner in which he is to be covered. He alfo  
imitates them in recommending all the disterent Exercises they  
used to prefcrihe towards the Termination of Diseases, such as.  
Walking, the different Manners of Gestation, the Exercise of  
the Voice in Vociferation, or talking loud, and the throwing of  
the Cort, or other weighty Machines, used for the fame Purpose..  
He also orders a certain Gesticulation of the Hands, which he  
calls *Chironomiae.* Now all these are **the** professed.Tenets of  
the Methedic Secti *Aretaus* indeed in one Instance .carries  
the Point of Exercise farther, and advises thofe who are subject  
to Vertigos to behave as Prize-fighters do, that is, to beat  
each other soundly with their Fists. ’Tis no eafy matter to  
comprehend his Meaning by this Advice. *Il/iercurialis* suppo-.;ses, that it is a Fault in the Text; which is not improbable,  
since we can soarce fuppofe fuch a Treatment proper for verti-.  
ginous People, who are incommoded and rendered worse by **the**least Noise or Motion. Besides, *Aretaus* hed this in common  
with the Methodic Secti that he ascribed a great deal to Topics,  
or external Applications, such as Fomentations, Cataplasms,  
and Unctions.

Tho’ *Aretaus* agreed with the Methodic Seel in the above-  
mentioned Particulars, yet on other Occasions he argued from  
quite different Principles, and prescribed Remedies that **were**openly disapproved of by *Thessalus* and *Soranus,* who were  
avowed Favourers of the Methedic Sect: For Instance, he  
orders Purgations, and the Composition called *Hiera,* was what  
he most used, and most confided in. He also on some Occa-  
sions prescribed simple Purgatives, such as the Fecula of wild  
Cucumhers, Bastard Saffron, and Hellebore. He no less re-  
markably oppofed the Methodic Seol, in venturing on certain  
Occasions to prescribe acrid and irritating Clysters.

He also ufed Castor on several Occasions, which the Metho-,  
die Sett never did; and, in direct Opposition to them, pre-  
sorihed Narcotio Medicines, fuch as Opium and the Poppy.  
But his Practice with regard to the Use of these was not rash  
and unguarded, as appears from the important Caution he gives  
in these Words; " ’Tis sometimes necessary, says be, toad-  
“ minister *sernniserous Medicines* to fuch as labour under Peri-'  
" pneumonics, or are afflicted with long Watchings, lest they  
“ should hecome furious, and in order to mitigate and allay  
“ their Disorder and inquietode. But we must heware of.  
‘i using Medicines of this Nature, when the Patients are in -  
“ Danger of heing suffocated with a Defluxion of Humours,i  
“ or are thought to he on the very Verge of Death, because in  
“ thefe Cafes the Physician runs a Risque of heing ceninred  
" for killing the Patient.” . r

Our Author’s Practice, with regard to letting Blond, was;  
also very different from that of the Methedic Sect; for in Apo-  
plexies he observed, that taking away too much Blond killed **.the**Patient, and that taking too small a Quantity, produced no Effeci  
at all: He was nevertheless of Opinion, that it was most proper  
to take little at.a time, and to repeat the Operation frequently.  
In **a** Quiofey, he ofed Venesection, and allowed the Blond to.  
fiow'till the Patient was ready to saint away. In Vomitiogs of  
Blond proceeding from whatever Cause, he universally recom-i  
mended Venesection: " For,tsays he, whether this Discharge:  
" of Blond is the. Consequence of a Vessel’s being broken, or.  
" corroded by the acrid Quality of the Blond, Venesection is  
" still very useful:; and if this Accident procceds from the.  
" Thinness of the Vessels, Phlehetomy prevents their being:  
"" burst, in Consequence of their being over-full. We must  
\*" alfo take care, continues he, not to allow the Orifice made

in the Vein of the Arm to agglutinato and close up, that we'  
".". may .the.more commodiousty take away a little Blond at

different times, for several Days running; a small Quantity.  
" must be taken at a.time; but the Operation must he repeat-  
“ ed the. same Day, the following, the third, and the fourth,  
" if the Patient’s Strength is not too much exhausted.” Some:  
Physicrans, in the Days' *cA Aretaus,* ufed in Vomitings of  
Blood to: mien the Veins of the Hand; but he entirely difap-:  
proves of that Practice; " For, says he, why would you rather  
“ open a Vein near the.Fingers .than in the.Place where the  
‘‘ Elbow bends, since; in the.letter, the Vein is larger, and  
better disposed for an Evacuation of the Blood ? ” In thee

Species of continued burning Fevers, called *Caufus,* from  
a *Greek* Word which signifies to *burn,* our Author also orders τ  
to take away a great deal of Blond, though at different times,  
and.’during several Days. We must likewise observe, that  
he imagined Fevers of this Kind to proceed from a Phlegmon  
or Inflammation, properly fo called, of the Trunk of *the Vena  
Cava,* or that of the great Artery. But wharfs surprising is,  
that the People of hrs Age imagined, that-Patients.labouring  
under that Species of Fever called *Causas* predicted suture  
Eventsj and -that, they talked or carried on Correspondences  
with the Dead. *Aretaus* feems to have heen convinced of this  
hinsself, since he endeavours to account for. it by saying, that  
the Heat of the Fever having confirmed the thicker and more  
gross Parts of the Humours, the Soul is by that means render’d  
more pure, and enabled to see things it did not- formerly per-

ceive. This Optnron seems to have heen originally broached  
by seine weak and superstitious Trifler, who listened to the,  
incoherent Reveries of Patients of this Kind, and endeavour-  
ed to find out a Sense and Meaning in them. In acute Pains,  
and Inflammations of the Kidneys caused by the Stone, *Aretaus*prescribed the taking away a great Quantity of Blond, in order  
to relax the Passage in which the Stone was lodged, and allay  
the inflammation of the Parts, which, he said, *wore compressed  
or bound up with a kind of Ligature, which could nor be resolved  
by any other Means than by evacuating the Feins.*

*Aretaus* did not confineVenesectionlto the Arm alone; for he  
ordered Bleeding in theForehead, for such as laboured under  
violent Head-ache, and took about nine Ounces of Blond from  
that Part, having first blooded the Patient in the Arms.

For the same Disorder he prescribed Bleeding in the Veins,  
that are situated in the Inside os the Nose, by means of cer-  
tain Instruments, one of which he calls κατειάδιον, and the  
other στορύνι». If none os-those Instruments can be had, he  
Orders the Barrel os a Goose’s Quill, cut at one End like' the  
Teeth of a Saw, to he pasted into the Nostriis almost as far as  
the *Os Ethmoides,* and to he moved in such a manner with the  
Hands, as to procure a Discharge of Blood. In an *Elephanti,  
asts,* of which he gives a Very exact Description, he orders.  
Venesection in both Arms, and both Feet, in one and the same  
Day.

*Aretaus* in his Practice made use of Vomits; for which Pur-  
pose he sometimes recommends the bulbous Part of a Species of  
*Narcisses*; but confided more in the efficacy of *White Helle--  
bore,* os winch he talks in this Strain : *" IF kite Hellebore,*\*\* says he, not only excites Vomitings, but is also the most  
" efficacious and powerful os all purgative Medicines, not with  
" regard to the Quantity and’ Variety of the Excrements of  
" which it occasions a Discharge ; for in the Disease called  
*" Cholera,* the Excrements come away in the same manner:  
" Neither is its Efficacy owing to the Efforts it occasions, or  
" the Violence with which it excites Vomitings, fince Nau-  
" seas, and Sailing on the. Sea, operate with still greater Vio-  
" lence ; but its Excellence is owing to a particular Virtue.  
" which cannot be sufficiently admired, fince, even in the  
" Cases where it purges Very little, it nevertheless cures the  
" Patients who use it. Besides, in Diseases of long standing,  
" when other Medicines have proved too weak, it is the only  
"\* one which operates with. Effect. In a word, white Helle-  
" bore resembles Fire ; sor what Fire produces by burning or  
\*r inflaming, white Hellebore produces more effectually, by  
" penetrating into all the Parts of the human Body. . It ren-

ders Respiration easy to those who breathe with.Dissioulty ;  
" it restores a fresh Colour to those who were pale, and Fat-  
" ness to those who were lean and extenuated. "

The Manner, in which *Aretaeus* us’d *Cantharides,* ought not  
to be forgot. The Abettors of the Methodic' Sect, and eVen  
most of the antient. Physicians used Medicines, to which they  
gave the Name of *Metafyncrtiical,* in order to draw Humours  
from the Centre to the Circumference of the Body ; for this  
Purpose they employ'd *Mustard, or* the Plant called the *deadly  
Carrot.* This was also a Part *osAretaatis* Practice.; hut he like-  
wise used Contharides, in order io attract’ inore’ powerfully, and  
raise Blisters son the SktrhyT which, might he full of an acrid and  
hot Water, and might,..in due time, discharge themselves, to\*  
the no small Relief of the Patient. This Species of Remedy  
is in out Days call'd a *Vesicatory*and I cannot find, that before  
his Tinie this Remedy wasttsed by any of the Physicians, or,  
at jeast,’ that Cantharides were employ’d Tor that Purpose by  
any except *Archigenes,* who was of the same Sect with *Aretaus,*and in all Probability liv'd some time before him. *set .*

The Knowledge the Anttents had" os the Effects produced by  
Cantharides On theIirinary Ducts, was probably the Reason  
why they look'd upon that Insect or Fly as Very Venomous,and a  
Species of Poison, which prevented their ufing them as a Medi-  
cine, except on some particular Occasions-...Thus, according  
to *Galen,* “ they Were mix'd with those Plaisters which were  
" desigsedsor making distemper'd Nails salloff; and thePow-  
" der of Cantharides, was usedin Medicines against the.Le-

prosy and Itch, and in the. Preparations design’d for con-  
" fuming and rotting .the Flesh.- He adds,, that .Cantharides  
" were us'd internally, in order to provoke a Discharge of  
" Urine ; but that great. Precaution, both with regard to the  
" Quantity and Method ..of Preparation, was absolutely necesse  
" sary, lest- they should-proye hurtful. 'Ἀ . Ἀ yed: Ἀ. f :i

*- Aretaus,* in Epilepsies, proposes Frictions softhe Head with  
Cantharides; and when treating of the Head-ach, he also men-  
tions those Remedies which-excite Blisters oh the Skin, thio\*-in  
that Passage he does not specify Cantharides.; 'Puti aS *Archige-  
nes* employ’d them on these Occasions, 'tis Him improbable lint  
*Acetous* might do the same. S'" - 'Y si

*. Archigenes* is by *Aetius* represented as speaking'in this man-  
ner : "We use, says he,/a Cataplasm, into whose Compo-  
" sition Cantharides enter, and which produces wonderful  
" Effects, provided the little Ulcers It excites remain suffici-  
" entry long open, and run sufficiently freely; But the Bladder

" in the mean time must he guarded and defended by the Use of  
" Milk, both internally and externally."

*Aretaus* was no less remarkable for ins singular Modesty, than  
for the Extent of his Skill and Knowledge Of this we have a  
remarkable Instance, in whet he says concerning a particular  
Species of Dropsy, of which other Physicians have made no  
Mention. " There is, says he, a Species of Dropsy form'd by’  
" a great Number of Bladders full os Water, and lodg'd in the  
" Place where the Dropsy Ascites has its Seat [that is, in the  
" lower Belly]. Each of thefe Vesseis is Very full; and if  
" we pierce the lower Belly with an Instrumen t proper for that  
" Purpose, the first of those Bladders which occurs discharges  
" its Contents, but afterwards contracts itself; and if we  
" want, that more Water should be discharged, we must pass  
" the Instrument deeper *fan order to pierce others os. the Blade  
“ dcrssp* Some, says he, affirm, that these Bladders proceed .  
*" from* the Intestines; but sor this I have not the Testimony of  
" my own Eyes, and consequently can ssay nothing concern-  
" ing it. "

*Aretaus* gives alfo an Account of another Disease, os a no less  
singular and uncommon Nature. " There is, says he, a Spe-  
" cies of Madness, in which rhe Patients, prompted by a Prin-  
" ciple of Superstition, tear their Bedies, and cut their Flesh,  
" imagining that by these means they render themselves dearer  
" to the Gods they serve, and that these Gods exacted such  
" Things at their Hands. This Species of Madness only takes  
" Place with regard to this Opinion, or religious Sentiment,  
" and the Patients are sensible enough in other respects : They  
\*e are roused or restored to themselves by the Sound of the Flute,  
" or other Amusements, or by bring made drunk, or by Peo-  
" pies making Remonstrances to them. This is a divine Fury;  
" and, when the Patients are freed from it, they are of a gay  
and chearful Humour, believing themselves to be initiated in  
" the Service of the particular God under whose Influence it  
C( was pretended they were. Besides, they are pale and ghastly,  
" and their Bedies remain for a long time weaken'd by the  
" Wounds they have inflicted on themselves. " ‘

AS this is not a proper Occasion for entering upon the Ana-'  
tomy of *Aretaus, -* I shall only take Notice of one Instance of his  
Conduct in this particular, which is,, that he generalsy begins his  
Chapters by a short Anatomical Description of the Parts whose.  
Disorders he intends to treat of in the Sequel of the Chapter.

Thus it appears, that Jr-etseus was a-Very exact and skilful Pra-  
ctitioner, and his Remedies powerful and well-chosen, the'at the  
same.time it must he own'd,’ that\* his Reasoning on Points os  
Theory was sometimes none os the’ most conclusive-: However, -  
as it doesnot appear, that it had any great Influence on his Pra-  
ctice, his Success, as a Physician, was not on that account the  
less considerable;^ . . ...

ἰ It now remains, that we fix the particular Time at which .  
*Aretaus* liv'd Γ a Point which no one has hitherto clear'd up in a  
satisfactory manner. Some Authors will have him to he after  
*Galen,* and others will have him to be much more antient. The  
Opininn os the former is supported on this, that *Galen* does  
not quote *Areteeus.* But besides this Circumstance of our not  
having all the Works of *Galen,* it may be answer'd. That it  
is not possible he should quote all the Physicians who liv'd hesore  
him. It was sufficient, that he mention'd the principal Men of  
each Sect, and spoke, for Instance, of *Atherueus and Archigrace,*who were the first and most celebrated of the Pneumatic Sect *i*Besides, *Galen* might have possibly not cited *Arepaeus,* because  
they might have both liv'd at one and the same Time ; so that  
the Argument, drawn from *Galeofs* Silence, with regaid *tD Arar  
tceuso* proves nothing either one way or the other.

*.' Vissnao* who is'among the Number of those who helieye *Are-  
tails* much inore antient, supports his Conjecture upon this  
Circumstance alone,-That this-Physician-wrote in the *Irnid  
Dialect,* which,'according to that'leanied' Critic, was.,in Diher  
ufe as well as the *Doris,* long hesore the *Caesar s', these* two  
Dialects heing never us’d, except when *Greece* flourish’d.’ But  
minis last-Assertion, *Viojsius* is mistaken, as Mr. *Menage [in. .  
Amoenitatibus fnrii] proves by* one of she Books os *Arrian,*intituled *Lndicu,* which is written in the *Ionin* Dialect, 'and by  
two other Books written in the Tame Dialect ; the ohe by an  
Author call'd *Cepsialio tys Cephalor* who liv'd finder *Adrian* as  
well as *Arrian,* and who is quoted by *Saidas y* the other byj  
*Gu&Dionysius Mylesius,* contemporary with *Philostresus,. visustt*liv'd under *Sevirusgi* anff who is also quoted *By Suillas.so* τ

These are Facts which cannot be contradicted;. and besides,  
we need only look *\xsxa Areteeus* himself,, to he convinced, that  
he is not so antient. This,in all Probability,. *Pesseus* had not.

' done with that'Leisure and Attention the ought'to nave us’d oris  
such an Occasion. Tf he had, he would'have-seen, that this  
Physician, far from living before the *Darfari,* could- hot have,  
liv’d at .soonest till under *‘Nerd.* To be convinced of this, he  
had no more to do than cast bin Eyes upon those Passages, in  
which *Areteeus \De CuofaL Diutunuor. Lib.* I. *Cap. ζ. et-  
ibide Lib.* 2; *Cap.* 5.J talks of. the Antidote compos’d of Vi-‘  
perss fince ?tis well known, that this Antidote is the Invention'  
*of Andrornachus* a Phy sician of *Nerols. " Acelaeus,* in :the above-

cited Passages, also makes mention of the *Antidote ofMithridates,,*by winch 'tis plain, that he liv'd aster that Ring, and confe-  
2uentiy cannot heve preceded the first emperors ; which fingle  
arcumstance is *os* itself sufficient to destroy the Conjecture os  
*Fosse us.* I shall not here mention the Compositions of *Philon,  
Byssinus,* and *Symphon,* which *Aretaus* likewise recommends, he-  
cause theTinies in which these Physicians liy'd are uncertain.

From all these Circumstances we conclude, that . the precise  
Time in which *Aretaus* liv’d, cannot be determin'd, tho' the  
Knowledge we heve of his Sect proves, that he could not live  
till after *'Athenaeus,* who is supposed to he contemporary with  
*Pliny,* who liv'd under *Vifpajian.* We also know, that *Are-  
. lceus* wrote before *Paulus A.gin eta* and *Aetius,* because these  
two Authors quote him. But from all this we cannot infer  
the precise Time in *rNlucffiAretaus* liv'd, because the two last-  
mention'd Authors did not live till upwards of two Ages after  
*Pliny :* Neither can we certainly determine whether *Galen* or  
*Ar at a us* wrote first. All we can lay held of as certain is, that  
they both liv'd in the Interval between *Pliny,* and *Paulus  
AEgineta,* and *Aetius* ; but this Interval is *so long,* that we can-  
not pretend to come very near the precise Time. It is not im-  
possible, as we observ'd before, but *Aretaus* and *Galen* may  
have been Contemporaries ; and it may likewise heve happen’d,  
that the one follow'd a great many Years after the other.

Thus far *Le Clerc. Wigan* concludes, that *Aretaus* liv'd  
after the Beginning of *Nerd’s* Reign, and before that of. *Do-  
milianls.. .*

**EDITIONS of ARETAEUs.**

*‘ f warns Paulus Crasses* publish'd a *Latin* Tranflation of *Are-  
taus* in 4to. *Vinetiis,* I552.

*facobus Goupilus* first publish'd *Aretaus* in *Greek,* and added  
five Chapters, which were wanting in the Tranflation of *Crosses.*This was accurately and correctly printed by *TurnebusRt Pario,*1554. in 8vo.

In I 554. also, *Rt Paris,* the *Latin* Version of *Crafsus* was re-  
printed by *G. Morelius,* and *J. Puteanus,* with Annotations,  
and the five Chapters which were omitted in the Version of  
*Crafsus, by an* anonymous Author, who is suppos'd to he  
*Goupilus. . ...*

In I 567. /L *Stevens* publish'd the last-mention’d Tranfla-  
tion amongst the *Medica Artis Principes.*

*Petrus Perna* publish'd the Version of *Crassius,* together with  
the five Books which before were wanting, translated by the  
same *Crasses. Brasil,* I58I. 4to.. . .

*Georgius Henis.chius* publish'd an Edition *CssAretaus in Greek*and *Latin, Augustee Vindelicorum,* I 603.

Dr. *John Wigan* publish’d a pompous and accurate Edition  
of this Author, in *Greek* and *Latin,* FoL *Oxon.* f723.

*Menage, Le Clerc,* and *Wigan,* take notice of a Commen-  
tary *ofiAret Anus* written by. Mr. *Petit,* a Physician at *Paris*; and  
seem to regret its not heing publish'd.

It appears by *Boerhaaue’s* Preface to the *Leyden* Edition of  
*Areteeus,* that he found means to procure the Manuscript from  
- which these Commentaries are printed in the Edition above-  
mentioned. . It is intituled.

*‘ Aretaei Cappadocis de Causis et Signis acutorum et diuturno-  
rum Morborum Libri ^statuor, de curatione acutorum et diu.,  
tumorum Morborum Libri squatuor, cum Commentariis integris  
Petri Petiti Medici Parisiensis, atque Clarissimi Joannis Wisc  
gani doctis et laboriosis notis, et celeberrimi Maitairii opusculis  
in eundem, tandernque crudicifsimi atque celebratissimi Danielis  
IVilhelmi Trilleri Observationibus et Emendaris. Editionem,  
curavit Hermannus Boerhaave, Luig.de Bat. faet.J*

ARETE, ἀρετῆ, Strength and Firmness either of Body or"  
Mind. 'Ἀρετἤ σώματος, in *Hippoc. Prorrh.* 2. is natural  
Strength of Body. ‘ ..ί \* .

’ AREUS, the Tide of a Pessary in *P. AEginrti Lib. I. Cap.*24. *stcatiAntistius. 'sisc.sc.si* ......π ..7.

AREAR; ARSAG, AYsenie. *Ruland. Johnson.*

i ARGXEUS MONSi A Mountain in Ος^σευὸρίσ, producing'  
Lithontriptie Stones. *P.AEpinet. Libcy. Cap. sue*

‘ ARGeMON, ARGEMA, ἄργεμοτι αργεμα, froth άργὸν»  
white, *Erotian* on *Hippocrates* expounds ἄργεμον by πάθος TT  
περὶ τοὑς Οφθαλμῇς λευκοματῶδες, *ofi urisp Ankiaroflotini* λευκό-  
τητος ῶνομάστὴ, “ a whitish Affection of-the Eyes, which  
" takes its' Name from the Whiteness oonseqhent tipon it? ”  
For the same Reason it is called by the *Ldttni Albugo. See?***ALBUGO.;; '** ..us .'. ) - - . .. ...

\* ♦ AR GEM ONE. See PAPAVER.

' ARGEMONLA. The Name of an Herb in *Marcellas Ernst  
piricus,* which he fays the *Greeks* call *Sarcocollay,* the same .br-  
ing bruised, if green, orjif' dry, macerated'in warm Water,-'  
that it may the more easily be bruised, and rubbed on the Fyes, I  
soon removes Lividness and Sugillafions.

’. ARGENTINA. The same aS PoTENTILLA, which **see.** Ϊ  
ARGENTUM, Offic. Met. Pin. 208. Fabri 6. Aldrov.

Muf.’.Metalh 72. Charl. Fossi 43. Worm. I I5. Schroff  
373. Schw. 366.. Calc. Muse-poo. Keptm. 59. ’ *Argon...  
turn, Luna,* **Mont, EXot. I**3. ' .SILVER. ?

*Silver* is of much greater Use in Traffic than Medicine. It  
has been much the Subject of Chymical Researches, more with  
**a** Design to meliorate Metals, than forming Remedies ; these,  
however, have by.Accident. heen found out, during Pursuits  
with Very different Views , so that it may he said, that the  
Love os Riches, amongst many bad Effects, has had, at least,  
one winch is usefid.

The Characters of Silver are, that it is,

I. The next in Weight to Lead.

2. Very simple, and discovers the least Diversity of Parts, by  
any ordinary Means. - . . .

; 3. Fin’d ώ Fire, fo aS, when pure, scarce ID lose any  
thing thereby. . Having heen kept two Months in a State of  
Fusion, in the Eye of a Glass Furnace, scarce one Twelfth of  
its Weight was found wanting. . And it may eVen be doubted  
whether it had been totally purisy'd first. ..

4. It is malleable, and ductile into Very fine Wire.

5. It ignites and. fuses at the same time.

6. DiflolVes in Aqua-fortis. . '

7. It is purisy’d with Lead, and sustains the same.

8. Turns to Scoria with Antimony, and becomes Volatile.

. It is found in many Places, .and in different Ores, having  
almost universally a little Quantity Of Gold in it.

.. To the Ore there usually adheres a corrosive'bituminous Sul-  
phur, which, by its rapacious Quality, renders the Silver Vola-  
tile, and dissipates it in the Fine, or eVen converts it into glassy  
Scoriae, to the great Loss of the Owner. This, which neither  
Salts nor Lead will hinder, is however prevented, by means of.  
Mercury, by roasting, the Ore, then reducing it to Powder,  
adding Mercury thereto, and grinding them long together, so  
as to unite the Silver with the Mercury ; which are afterwards  
to be separated again by Distillation. *Boerhaaugis Chemistry,  
Vol.* It

*The Solation of pure Silver in Spirit of Nitre, or Aqua-fortis,  
from* **BOERHAAVE.**

I. T'ake an Ounce of Silver, refin'd with ten times its  
Quantity of Lead, upon the Refiner's Test ; melt it in a  
clean Crucible, and directly pour it into fair cold Water,  
eight inches high, in a cylindrical Vessel: The Silver salis  
into it with a hissing Noise, and is scatter'd about in **the**Water in Grains : It is now called granulated Silver. Put  
an Ounce thereof into a clean urinal Glass ; then take two  
Ounces of Aqua-fortis, put thereto a Grain of refin’d Sil-  
/ ver ; and if it be soon perfectly dissolved, so as to have **the**Liquor limpid, the Aqua-fortis was good, and fit for this  
Purpose ; but if not dissolved, or the Liquor appears tur-  
bid, the Aqua-fortis is not genuine, or proper for this  
Purpose. The first kind of Aqua-fortis is called Proof  
Aqua-fortis, by **the** Refiners. Pour two Ounces of this  
Proof Aqua-fortis upon an Ounce of granulated Silver,  
contained in the urinal Glass ; the Liquor immediately  
begins to move, bubbles, grows warm, fumes and hisses about  
**the** Surface of the Silver, and then becomes spontaneous'  
hot, briskly agitated, sends out red Fumes, And dissolves  
the Silver,- fo that it perfectly disappears. A transparent  
colourless Liquor is thus obtained, of an exceeding sharp,’  
‘ bitter, and caustic Taste ; a littie of a Very black Pow-

der always remains at the Bottom of the Glass..' This-  
Powder is pure Gold, which either .always adheres to.  
Silver, or else, perhaps, is easily produced from the Lead

' ? in the Fire,’ as Mr. *Hornberg* conceives ; and heing inca- ’  
' pable of dissolving in Aqua-fortis, is thus precipitated'from'  
the Solution': Pour off the clear Liquor Into a clean  
Glass, and intitle it the *Solution of' Silver. ‘ yl" ‘*

; 2. If, instead of Aqua-fortis, Spirit, of Nitre'he employ'd,  
.. .. the Solution is perform'd quicker and stronger; but other-  
wise, in the same manner ; *for* Aqua-fortis, or Spirit of  
Nitre, prepared either with Bole or Oil of Vitriol; scarce  
:.. seem to differ, except in being more or less acid but if  
-. the least Particle of common Saltor Sal Ammoniac should'  
- . have fallen intoi the.Spirit.Of Nitre, or Aqua-fortis, or'  
have been mixed .with them: in the - Distillation, :Or rafter- '  
ι .S wards, they.willmot. dissolve theSilver. . : 1...Λ hy:i r '  
r.h J R E M:A R KR . -i : . άς '

If this Solution proves limpid, the -Silver was pure , hut if.  
/greenish, it contained some Portion os Copper, and is not  
\_ fit for the following ExperimentsThe Silver here, united  
with the Acid os the Spirit os Nitre., keeps suspended in the.

\_ Water; a Drop os the Liquor, apply’d to any sosr. warm  
..Part of the Body, instantly burns and eats it.; whence, at  
once touching, it eats callous and hard Lips of Ulcers, fepa-  
rates the corrupted Part, and presently takes away Marks,  
Spots, Warts, and small Cancers. *.It* may be diluted with  
pure Water, without growing thick, or precipitating ;. bur  
if theWater contains the least saline Matter, the Whole will  
..Presently grow turbid. This Solution, well weaken’d with

Water, is highly detergent, het **stains** the Skin it touches  
with a black Spot, that cannot he got out before the.Scarf-  
Ikin falls off. Hence we see bow the ponderous Body of  
Silver may lie concealed in a sight limpid Liquor ; but it may  
he discover’d by its violently bitterTaste.

*The Vitriol vs Silver.*

I. To the Solution made in the preceding Process, gradually  
put single Grains of pure Silvey, so long as it will dissolve  
them. When the last Grain remains perfectly undif-  
**solved,** set the saturated Solution in a cold Place ; it will  
presently begin to form llttle, thin, white Hates, lying  
over one another, as if compos’d of triangular Needles  
like Nitre. If the Liquor he pouted off from them, we  
thus obtain the Crystals, Sale, or Vitriol of Silver, which  
may be dried, but are so sharp, that they cannot safely be  
touched.

2. If the former Solution he not Further saturated with Silver,  
but inspissated a little, fo as to lore about a tenth Part,  
and then be set by for some time, the Silver will concrete  
. at the Bottom of the Glass m a solid Form, into white

Crystals, in other respects like the former, but much  
sharper, as being here saturated with more Acid., And  
thefe also have a much greater caustic Virtue.

REMAR K S.

"We here see the particular and mutual Attraction betwixt Silver  
and the Acid of Nitre, as Silver scarcely unites with any other

' Acid ; for; tho\* it toms black, it does not dissolve with  
. them. This Vitriol of Silver is a most immediate Caustic,  
and leaves a black Spot upon any Part of the Skin it touches  
ever so nightly ; and this Spot cannot be got off but by the  
sealing off of the Skin.

*The Lunar Caustic.*

i. Take Potters Earth that is well wrought, and not very  
moist ; make it into a solid Cube, and perforate the upper  
Surface thereof perpendicularly, with a conical Stick, al-  
most to the Bottom. Let the internal Surface of the  
Whole be smooth, lest the Matter poured in should come  
out rough. When as many of these Holes are made as  
are necessary, press the upper Part of each with the Fin-  
ger into a wide spherical Cavity, the Middle whereof  
ends in a conical Hole ; for thus the Matter may be easily  
-poured in.

2. Then take a llttle Glass Dish, or urinal Bottom, and  
frit into it the first Crystals of Silver of the preceding Pro-  
cess , set the Glass, without any Fear of breaking, upon  
burning Coals ; the Crystals will discharge an unctiious  
Fume, which ceasing to rise, whilst the Matter flows in  
the Glass, poin it carefully into the conical Cavities made’  
in the Cube of Clay ; it will enter with an hissing Noise.  
If the Matter in the Glass should happen to grow stiff, set  
it again over the Fire ; and thus pour out all the prepared  
Silver into the hollow Moulds:

3. As soon as the whole Matter is grown solid, immediately  
break the Clay, and take out the conical Sticks of Silver ;  
wrap them up in hot Paper, and dry them thoroughly  
. therein , - then wipe their Surface with a hot and dry

Hare's-foot, and thus immediately put them into a clean  
Glass, that is to be well stopp’d with a Cork . and thus  
an excellent Caustic will be obtained sot Chirurgica} Ures,  
and may be kept for many Years.

RE MA R K S.

The Acid of the Spirit of Nitre, in the Glass over the Fire,  
lofes its Water in the Form of Fume, and also that Part of  
its Acid which remained above what a certain Proportion of  
Sheer could retain ; but the Silver detains a certain Propor-  
tion of the Acid with itself, so as not to fume, but remain  
fixed even in Fusion over the Fine. This Acid, retained in  
the Body of the pure Silver, forms a solid Mast, in which,  
perhaps, the Acid is the purest and strongest that can he  
. prepared. When this Acid, adhering to the Sheer in a solid

Form, is exposed to the Air, it attracts the Moisture thereof,  
and fo dissolves. The Whole of this Caustic will also dis.  
: solve in Water ; from whence, by the means of Copper,  
all the Silver may be recover’d, insipid, inodorous, unactive,  
. no way acid or corrosive, but pure, metalline, and un-  
- changed It is strange, therefore, that the Acid should so  
long adhere to the Surface only of the Principles of Silver,  
- without changing them, *so* as "that the Nature of the Me-  
. tal may be entirely recover’d unhurt. This is a most pow-  
ersul Cautery, and, by a bare Touch, instantly burns the  
Parts of a live Body to an Eschar, under which. Nature  
raises an Inflammation that separates the crude Eschar, and

leaves the Part pine ; so that, by repeated Touches with this  
Matter, all superficial, foul, fungous Ulcers and Cancers  
are excellently cured. Hence skilful Surgeons highly extol  
the Virtue of this Stone j and Physicians also learn the won-  
derfril Power of an Acid, when collected and fixed.' If given  
internally in this Form, it is an immediate corrosive Poison,  
and therefore never to be used in this manner. I have known  
it prove pernicious to the Artist that prepared is.

*'The Silver Pill of* **BOYLE, οτ AKG'ELUs SALA., V**

. I. Take an Ounce of pure Nitre, and dissolve it in pure  
distill’d Water;; then take an Ounce of the pure. Crystals\*  
of Silver, made according .to the Directions,above.; dis-  
solve them in thrice their Weight of fair Water, so that  
the Liquor may be perfectiy llmpid ; mix thetwo Solu-  
tions together, they will thus,make an homogeneous, uni-  
forrn, and apparently simple Liquor, without precipitating  
the Sllver ; but uniting perfectiy with the Nitre. Put  
the pure Liquor into a clean urinal Glass, and set it over  
a clear Fire, in a Place free from Dust,' sill the Water,  
which will .thus be almost pure, exhales, so as to leave a  
Pellicule. Set the Glass in a cold quiet Place,’ well co-  
vered to keep out the Dnst - Crystals, like Nitre, will thus  
shoot. Pour off the remaining Liquor, and exhale as he-  
fore the Silver and the Nitre will be thus joined jo the  
simple Form of Crystals. Let this Mais be gently dried.

2. Let there be at hand the Bottom-part of an urinal Glass,  
s into which put the Crystals of Silver and Nitre, first dried in  
- Paper;, set this Glafs on the Fire, so as to prevent the Matter  
from running by the two great Heat or Nearness thereof,  
and permit it only to dry or to fnine ; keep it constantly -  
stirring with a Stick of Glass, so that it may every way be

*.-r* exposed to a strong Fire, het so as not to melt, that it  
υ may he dried-and freed from the sharp Acid that adher’d  
to the Mass, and easily render’d it cauftic ; but if the Fire  
should melt it, then the Acid, being more clofely united,  
fixes the corrosive Virtue, which by this gentle Calcti  
i'o nation is separated. Let this Calcination be performed  
with Caution, for along time, keeping the Matter conti-  
nually stirring till no more Fume rifes, the’ the Fire he  
now coosiderably strong, . and almost able to melt the  
Matter ; for at last, after the Heat has' separated' all this  
Acid, there is no Harm if the Mass be fused, because all  
the external Acid is now driven from it ; and thus the  
purging Silver will be prepared, of an extremely hitter  
Taste, and should he kept in a dry dose Vessel.

*. -ami* R Ε M A R K *Sl*

Ii is a wonderful and secret Art to unite Silver with .Nitre :  
Hence the pretended Alchemists can, by this means, conceal  
Silver in a large Proportion of Nitre, as ten times its Quan-  
tity for Example; and this Nitre, being projected in an equal  
Quantity upon melted Lead, gives an Increase of one tenth  
Part in Silver, which, remaining upon the Test, will deceive  
the Ignorant, as if a tenth Part of the Lead was here turned -  
into Silver. The Way to discover the Cheat is to dissolve  
, the Mass of Nitre’ and Silver in ten times its Quantity of  
. pure distill’d Rain-water; then put a polish’d Plate of Coppet'  
into the Liquor ; for thus every Particle of the Silver will  
immediately he precipitated to the Copper and Bottom of the  
Vessel, and thus ho obtained perfectiy pure from the Nitre  
and Spirit of Nitre, If, therefore, any Salt he pretended to,  
for the making of Silver, let it be examined in that manner.  
Take this dried Mass,, consisting os the Salts of Silver and  
Nitre ; reduce it to a sine dry Powder, and it will be-of an  
extreme bitter Taste, but by no means so caustic-as before.  
If a hide of it be apply’d to Ulcers, it acts like the- Lunar  
Caustic, only much milder, and if two Grains .of it he  
sine ground with six Grains of Loaf-sugar, in a Glass.Mor-  
tar, then mixed with ten Grains of the Crumbs *of* Bread,  
and formed into nine Pills, and thefe he taken by a grown  
Person upon an empty Stomach, drinking after them four or  
fix Ounces of hot Water sweeten’d with Honey ; they will  
purge gentdy, and bring away a liquid Water, that ofren ced  
ceives the Patient, as coming away almost without being  
perceived. It kills Worms, and cures many inveterate ulcer-  
ous Disorders ; relieves in the Dropsy, and purges without  
griping; but it must not be. used too freely, not in roo  
large a Dofe; for it always proves corrosive and weakening,  
especially to the Stomach, which Inconvenience is rein edy’ti  
by the Roh of Juniper.

*Inflammable Silver;*

Take an ignited Piece of *Dutch* Turf, after' it . ceases *to*frnoke; place it with its upper flat Surface parallel to the  
Horizon ; make a llttle Cavity in the Middle of its Sur-  
face, and therein put a Drdin of dry Lunar Caustic ; it  
will here immediately melt, glow, take Flame, hifs, and

shine as brisk! v in every respeol as Nitre. Aster the Plante  
ceases, pure Silver will he found in the Hollow, as much  
mi Quantity as was dissolved in making of the Lunar Cau-  
stic, and may thus he taken out with a Pais of Forceps,  
without Loss of Weighs.

REMARKS.

This excellent Experiment'thews the physical Manner wherein  
Acids do but superficially adhere to Silver, and the Manner  
wherein Acids operate, when united to Metals, whilst, fur-  
e rounding their metallic Mass, they arm the ponderous Prin-  
ciples thereof with Spicuhe. It shews the Immutability of Sil-  
ver dissolved in an Acid, and the various Ways wherein it  
may lie concealed, yet still have its Action f It alfo shews  
the Difference of potable Silver, while existing in a saline Form  
by means of an adhering Acid, from that potable Silver of the .  
Adepts, where the Principles of the Silver are fiippofed convert-  
ed into a Fluid, that will mix with the Juices of the Body, and  
cannot be reduced to Silver again; but chiefly ir hence appears,  
that the acid Spirit ofNitre, adhering in a solid Mass to the Sil-  
. ver, is as inflammable along with a combustible Body, as Nitre  
itself. This seems to happen in Silver stone, which is un-  
' changeable by the Spirit ofNitre. Hence also we fee one  
way whereby Silver may be obtained pure from other adhere-  
ing Matters, by hare burning. The Acid here acts neither  
upon the mercurial Part ofthe Silver, nor its fixing Sul-  
phur.. - ’ - . ” . -

*The Recovery of Silver, when dijselvest in. Spirit of Nitre.*

Dissolve an Ounce of pure Silver in Spirit ofNitre; dilute it  
with twenty times the Weight of distilled Rain-water ;  
heat the Solution in a cylindrical Glass Vessel, and put  
therein polished Plates of Copper, the smooth Surfaces  
whereof will every-where begin rd be covered with a.grey  
Colour, and at length appear as if thick set with Down.  
The Liquor that before was aqueous and colourless, will  
now gradually turn more and more green, in proportion  
as the Down upon the Copper Plates grows larger. If a  
Piate be shaken, the downy Covering tolls off from jt to  
the Bottom, and another like the former presently comes  
on ; the Liquor grows greener, and the Plates grow. less.  
The downy Covering being again shaken off, a fresh one  
grows, and this happens, till at length no. tnore, of the  
Copper dissolves. Now leave the Vessels for fix Hours at  
Rest ; afterwards shake off all the grey-coloured downy  
Matter from the Plates; decant, and filtre the Liquor, it  
will be of a beautiful green Colour, sharp, and entirely  
cupreous; the Plates will be much diminished in Β  
and Weight. Let the Matter ar the Bottom be washed in'  
several hot Waters, till it becomes thoroughly pure; then  
- -' dry it over the Fire : It will be a fine shining Silver Pow-  
der, and yield nearly all the Silver employed, pure, insi-  
pid, and mild, without any Acid; nor will it contain

- the least Copper. ‘

REMARKS. δ᾽ ss

This is a Method of calcining Silver to a fine Powder, which  
cannot easily be obtained fo subtile by any other Means.  
This Powder, being ground with Mercury, easily affords an  
Amalgams, which is otherwise so difficultly obtained, and  
not without a great Loss of the Quick-silveri If this Pow-  
der be melted in a Crucible, it restores the same Silver that  
was employed. Hence’therefore it appears, how superficially  
the Acid of the Nitre adhered to the Silver; fibre the Whole  
of this Acid is *so* easily attracted by the Copper from the Sll-  
’ ver, without any Remainder. If the Liquor of this Opera-  
' tion he viewed with a Micr°sCOpe» .it appears plainly, that  
' little Particles of Silver are violently carried along with the

Acid of the Nitre up to the Copper Plates from all the Points  
of the Solution. But when these Spicuhe arrive at the smooth  
Surface of the Plate, the Acid is attraoled to rhe Particle of  
the Copper, whilst the Particle of the Silver', deprived ofits  
' Acid, rests upon the Surface of the Copper; and being there  
increased by others coming .to it in like manner, at last, a  
soft downy Case is composed ; and this Attraction is *so ex-*qursitely performed, that not the least Particle of Silver re-  
mains in the former Solution. Hence it appears, that Cop.  
- per more strongly attracts the Acid os Nitre, than Silver  
does: ; wherefore this Action consists in Attraction, and a  
Straining of the Acid from the Body of the Liquor ; *for* the  
Acid pastes thro’ the Pores of rhe Copper, leaving behind the  
Particles of the Silver now sot free, 'and unable to enter,  
there is scarce a more beautiful Sight than this with a Micro-  
scope. The Acid of the Nitre remain’d unchanged in the  
‘ Silver, and is collecied persedi in the. Copper, from whence  
it. may again be procured.

*. . Canes Cainsea. '' ’ - ’*

I. To the pure Solution of Silver made with Spirit ofNitre,  
according to the above Directions, and diluted with sour  
times its Quantity of pure Water, let fall by a Drop at a  
time, in a capacious Glafs Vessel, a final! Quantity of a  
strong and warm Solution of Sea-salt in Water. At the  
Instant the Drop falls in, the whole Liquor grows white,  
and surprisingly thick, without any Effervescence. Con-  
tinue thus dropping in, and shaking the Glass, sill the Li-  
quorno longer continues turbid ; thenletitrest; a gross  
white Matter will fall to the Bottom in a large Quantity.  
Let the limpid Liquor at the Top be poured gently off,  
and drop into it a little hot Solution of Sea-salt; if it grows  
thick no longer, the Operation is well performed; hut  
otherwise forne Silver remains behind, which requires to  
. be separated. Pour clean hot Water -upon the white pre-  
cipitated Matter, and wash it till it becomes perfectiy insi-  
pid , then hell it in an Urinal, with a little fair Water ;  
shake them together, and pour the Whole into a Paper-  
filtre, where the Water will pass thro, and leave the  
white Matter hehind, which is to he dried with, a gentle  
Fire, and preserved. This is a subtile Calx of Silver pre-  
cipitated with Sea-falt from Spirit of Nitre, or Aqua-  
fortis ; it will weigh more than the Silver employed, by  
nearly a fifth Part, on account of the Salts which adhere  
thereto.

2. Put this Calx of Silver into a clean Crucible; fet it in a.  
s Fire of Fusion, till it melts, which it easily does, when  
melted, pour it out on a Marble. It appears a ponderous,  
.shining, opake, brown Mass, that breaks brittle with some  
Degree ofTenacity, whence it-is called horny. It con-  
tains all the Sllver employed, and at the fame nine the  
-... Acid of the Nitre and Sea-falt, wonderfully concreted  
therewith, so as not to he separated ; for by endeavouring  
with a violent Fire to drive away the Spirit, which is so  
easily done in the *Lunar Caustic,* the greatest Part here  
becomes volatile, and the Remainder is scarce recoverable  
into Silver, het remains changed by the Admixture of the  
**7.** Salts, fo intimately united and .fixed, as not to manifest  
themselves by any saline Property. If one Parr of pure  
Silver,.- calcined according to the above Directions, be  
mixed with two Parts of Mercury sublimate, and distilled  
in a Glass, Retort, with a strong Sand-heat at last, almost  
the seme perfecti *Luna Cornea* will remain at the Bottom  
*'.l'* of the Retort.’ And if instead of Salt the Spirit of Sea-falt  
were used to the Solution of the Silver, the *Luna Curata*would be perfectiy the fume. Mr. *Boyle* fays, that Silver,  
heing- precipitated from Spirit of Nitre with Oil of Vitriol,  
- then washed and soled, will become a true *Luna Cornea.*

*..... . R.* E M A R K S. -

This Experiment is of infinite Use, and shews how sinall a Dif-  
ference in a physical Circumstance may often occasion a great  
. Difference in the thing physically produced ; for Silver mixed  
- with *Aqua Regia* does not unite with the Acid thereof; but  
if, when Sllver is dissolved by Spirit of Nitre, Sea-falt is added  
.thereto, the’ it-thus only makes an Aqua Regia, yet it pre-  
. sentry occasions tile Acid of the Aqua Regia to unite inti-  
mately with the Silver, and.produce change Effects; For if  
two Parts of the precipitated Calx of Silver be well ground  
, with one Part of Regulus of Antimony, and distilled with **a**Sand-heat, there comes over a. pure Butter .of Antimony,  
equal ip Weight to the Antimony employed., whilst the Sil-  
’ ver remaining at the Bottom always affords true. Gold upon  
the Reduction, Hence we may he certain, thet the Weight  
gained by the Calx of Silver is owing tojthe Aqua Regia fixed  
therein, because it here goes into, the mercurial Part of the  
Antimony ; whence is is no Wondes, that those eminent  
*Chyaii&sBecher, Boyle,.Hamberg, and Stahl,* have so much  
regarded the concealed arsenical Nature of the Metals and  
Salts in this Experiment. Who could conceive, that the ex-  
ceedingly insipid Body, of *Lura Cornea* held a fisthPart of  
. the higniy. corrosive Acid of Aqua Regia f Hence we see  
what a particular Power Sea-salt-has upon Metals, how co-  
vertly it may adhere to, and again he recovered from them  
. without Loss of its Virtues.. - Hence also we sec how strange-  
ly Metals may be disguised and concealed ., and again, bow  
Gold may he obtained from a Matter in which the Assay  
Masters could not, by all their Art, discover any: And  
hence Adepts have staid, that Nature has only placed Per-  
fection in Salt and Gold and hence we may also learn to  
guard against the fraudulent Practices of those who craftily  
mix this Calx of Silver with Nitre,- or throw it into melted  
Lead, and thus pretend an Increase of Sllver or Gold. But  
out present Design does not lead us farther into this Subjecti  
. It is certain that the Industry of Mr. *-Hamberg,* by rhe Means  
-of Tartar, Quietrlime, Sab Ammoniac, and sire White of

*. t.. ......*

Eggs, has from half a Pound of Silver obtained, as he de-  
- tlares, three Drams and fifty Grains of running Mercury.  
' And so much of the Nature of Silver for the profent. *Luna*

*Cornea* neither dissolves in Aqua Regia, Aqua-fortis, nor the  
. - Fire. *Boerhaavrs Chyndstry, Vol. 2.*

ARGES, in *Hippoc. Lib. 5. Epidem..* seems to he the  
Name of a Serpent, which crept into the Mouth ofa young  
Man as he lay on his Back afieep after plentiful drinking of  
Wine. The Event was, that as soon as be was sensible, not  
heing able to speak, or try out, he clench’d his Teeth, and  
swallow’d the Serpcnt, and, heing seized with dreadful Pains,  
threw abroad his Arms like one strangled, and tumbled and  
tossed about, and at last dy’d in Convulsions.

ARGESTES; or *Circius, in Aetius, Tetrab. t. Serm.* 3.  
*Cap.* I63. is the Name of a Wind between theNorthand West.  
The North-west Wind: .. ----- -

- ARGILLA, Offic. Mer. Pin. 2I9. Charlt: Foss. I. Worm.  
Must 2. Schw. Foss 365. Aldrov. Must Metall: 227. *Argilla  
nestras-stgulina, ϊηά. Meds 1^.* -CLAY.

Clays of all Sorts are esteem’d drying, astringent, and abs-  
terging *Dale.- - . " . - -*

Clay, as here understood, is a ponderous Earth, deofe, viscid,  
and stipoery. ' Being held for some time in the Mouth, it makes  
an Impression on the Tongue; something between that of Soap  
and Fat: When fresh dug, it may be moulded into any Figure  
like soft Wax ; and by Fire if may be made as hard as a Stone.  
The Species of Clay are almost innumerable ; Some are white,  
resembling Suet, fuch as thet saponaceous Earth with which the  
Waters of *Plombiere* in *Terrain* are impregnated ; forne are  
variegated, like the different Kinds of Porphyry and Marble, as  
certain Earths found in *Bohemia.* ‘Others are of an Ash-colour,  
**red,** or biack. The Clays used- in Physic are, the *Lernnian*Earth, the Earth of *Malta,-* and severed other sealed Earths  
from *Germany. Geoffrey, s' .*

Clays which are used in Medicine are known in the Shops by  
the Name of *Terra,* Earths, of which the principal are

The Terra Chia, - Terra Pnigites,  
\_ Terra Cimolia alba. Terra Portugallica,

Terra Cimolia purpurasoens. Terra Sarnia,

Terra Eretria, Terra Sigillata alba & rubra,

Terra Lemina alba, „ ., e Terra Sigillata Livonica,

i Terra Lemnia rubra. Terra Silesiaca,

Terra Noceriana, Terra Turcica,

’ , Ocra, ” ς - \_... Terra'Vitriolatat

All these are taken Notice of as they occur.

ARGKTATA, *Incerata,* or waxed. *Ruland. Johnsen.*

“ARGOS,-άργὸςν from α Negative, and ἔργον. Work or Bu-  
siness, as if it *were* ἀερχος. So ἀργὸς ἀργυρος is Silver not  
work’d; ἀργοί πυροκαὶ in *Hippocrs* περὶ ἀρχαίης ιητρ. is crude  
Wheat, not ground or prepared, but such as it is taken from  
the Floor. Ἀργὸς allo signifies idle, without Business ; and  
thus άργά. in *Hippocrates,* is expounded by *Erotian dysprstreo*» λευκοἱ, " without Labour, or Holiday-like; ” for λευκὴν  
ημεραν διαγειν-is, " to spend a Day in Mirth and Pleasure; ”  
in which Sense we are to understand that of *Silius Italicus ; -*

*.. — Albofque Dies, Plarafque serenas.*

ARGYRITIS *Terra,* ἀργίιριτις γη, from ἀργυρος, Silver.  
A sort of Earth taken out of Silver Mines, which is bespangled  
with many ParticIes of Silver intermixed. *Gal. Dof.*

There is another *Argyritis,* which is a sort of *-Spumae Argenti,*or Litharge. See SPUMA **ARGENTI.**

ARGYROCOME, ἀργυροκομη, from ἀργυρος. Silver,- and  
κομη. Hair. A Species of GNA-FHALIUM, which see. *Plan-  
card. .. -- : ‘ ;*

ARGYRODAMAS, αργυροδαμας, from ἀργυρος. Silver,  
and δαμάω. to conquer. A hind of Talc, of the Colour of  
Silver, - that - will not yield to the Force of the Tire. The La-  
minae hereof swallowed adhere-to the -Stomachi Fauces, and  
Throat, and. endanger an Inflammation of those Parts. *Ca-  
stellus. ~ ... - ,*- ARGYROGONIA, ἀργυρογοηα, from ἀργυρος. Silver,  
and γίνομαι: to he made or generated of. An argentific Seed,  
perfectiy digested 'from a Solution of Silver, or an argentific  
Tinctsre of a white Colour, in the same manner as *Chrysegonia*is the aurific Seed. See CHRYSoGoNIA.' *Castellus.*

ARGYROPHORA,-αργυροφορἀ, from ἀργυρος, Silver, and  
φέρω,- to-bring. --The-Name osan Antidote *net Myrepsas,* which  
seems to be so called on account of its Costliness. - ’ - 1

ARGYROPCEIA, ἀργυροποιια, from ἀργυρος, and ποιέω,  
to make. The Art of making Silver out of more imperfeiS Me-  
tals and Minends, by Means of the Philosopher’s Stone, or rhe  
Philosopher's Mercury, or rhe argentific Seed,- fpeken of before  
under ARCYRoGOKiA, which fee. *Castellus.*

ARGYRUS, ἀργυρος, Sllver. - - - '

ARGYROTROPHEMA, ἀργυροτροφημα; from ἀργυρος.  
Silver, and aequi». Nutriments Α kind ofTood made of Mills,

and designed to allay the Hear of the Bndy, and to moisten it.  
*Galen, de Succ.*

ARHEUMATISTOS, αρευμἀτιστος, from α Negative, and  
ῥευμα, a Deflexion. An Epithet bestow’d on rhe external  
Parts, and especially the Joints, while they are free from gouty  
Rheums. *Castellus.. .*

ARIA, Offic. *Aria Theophrasti,* Ger. II46. Emac. .I327.  
*Area Alni estigie, folio laniato, major,* Jons. Dendr. 69. *Sor-  
bus Alpina,* J. B. I. 63. Raii Hist. 2. r 459. *Sorbus silvestris-.  
Aria Theophrasti dista.* Park. Theat. I 421. *Mespilus Alni  
lanatofolio, maser,* Herm. Can. Hort. Lugd. Bat 424. *Me-  
spilus Alni folia fubtus incano. Acia Theophrasti dicta,* Raii Syn-  
°Ρ. 3. 453. ’ *Actefpilas Alpina, folia Alni lanaio, major,* Rupp.  
Flor. Jen. *i so.- . Crataegus. Alpinus, Alai folio incano,* Ejufd.  
*Mespilus Alni effigie, lanato folio, maior,* C. B. Pin.. 45 I.  
THE WHITE BOAM-TREE.

It grows in Woods upon rocky Mountains, and flowers in  
*April.* The Fruit is recommended for mitigatiog Coughs, and  
promoting Expectoration. *Dale. .. ..*

ARICYMONjnierquiiav (from the augmentaove Particle  
*Ass,* which is never read but in Composition, and ιουέω, to pain-  
ceive) in *Hippocrates asci urixuitej&s,* ..is explain'd in *Galen’s  
Exegesis* by vi ταχέως έγκὑμων γενομένη, μ One who foon con-  
" ceives.” Άεικὑμων. in *Hisechius,* is expounded by ἐνισὑλ-  
ληπτος. " Easy and prompt to conceive.” '

ARIDA MEDICAMENTA, spipg φάρμακα, dry Medi-  
cines, are fuch as consist of Powders. *'Aetius,* in his *Tetrab.* 2.  
*Serm.* 3. has a good long Chapter, *Cap.* 98. wholly on dry  
Collyria for the Eyes. ...

ARIDITAS *Corporis,* a Dryness of the Body, See Ma-  
rasmus. Also the lanuginous Superficies of the Tops of the  
Hairs, when they look as if they were powder’d, is call’d a  
Dryness, ξηροωία. *Gal. Dof. Mnd.* There is also an *Ariditas  
Lingua,* Dryness of the Tongue, a common Symptom in Fe-.  
vers. ' ''

ARIDUM, ξηρίν. The fame as Siccum, which fee.

ARIDURA, a total Consumption, or Syderation, as they  
call it, of the Body or Members, *liuland. Johnsen.*

ARIES, a Ram. The Flesh of the Ram is more rank  
and indigestible than thet of the Sheep or Wether. Sec  
OvIs. . . i .' . . .

ARIGEOS, ιἐνιγέως, from α Negative, and εἴγος. Cold,  
in *Hippocrates, De Rat. Vict. in Morb. a cut.* signifies, without  
Cold, and is there opposed to άδαλπέως, which is from α Nega-  
tive, and όάλπος. Heat; and denotes the Absence *of* thatQua-  
lity. - \_ si si ' - ....

ARILLA, γίγαρτον. The same as GIoARToN, which  
fee. -

ARIOBARZANIUM *Emplastrum.* The *Ar^larzanian*Pleister. The Composition fee under the Article ABscBssUs.,

ARIS, *aeus,* is expounded by *Galen,* in bis *Exegeftsuriu prior*τὸ ἱργανον, ἀλλἀ καὶ *^o]dni ris* ουτως ὸνομαίομένη, ςς Not only an  
" instrument, but an Herb so call’d;” which is the same as  
*Aristarum or,* as others will have it, a final! kind of *Arifarum.*

ARISARUM, Offic. *Arifarum angujlifoliurn Diofcoridis  
forte,* C. B. Pin. I96. Boerh. Ind. A. a. 73. Hist. Oxon: 3.  
545. *Arifarum angastifolium.* Ger. 686. Emac. 835. LB. 2.  
.787. Chain 258. Raii Hist. 2. I2I1. *Arifarum longifolium.*Park. Theat. 375.*Arum humile angastifolium, pistille langissemo  
tenui infiexo mucronato,* Herm. Cat. Hort. Lugd. Bat. 60.  
*Arum Scoriorrnerae folio,* Elem. Bos. Igo. Tourn. Inst: 160.  
FRIERs-COWse S --

This grows in *Italy and Dalmatia. ......*

*Diofccrides* says it is a small Plant, with a Root like that of  
the Olive, and more acrimonious than the Arum, which, he  
fays, stops the Progress of *Namae,* if apply’d to them by way of  
Cataplasm. Of this Root are also mede *Collyria,* .which are  
effectual in curing Fistulas. *By Collyria* Diofcorides *does not  
"mean what ave callse, but Tents made in the Shape* **ascaCOLLY-  
RIUM,** *which see.* It corrupts: the *Pudendum* or any Animal  
whatever, if introduced into it. *Diofcorides, L. ϊ. Ce* rgg.

It heats, dries, incides, opens, absterges, and digests. *Dale*from *Galen. '. -* . ’ '.i ;' -p .

. ARISTA, is that sharp-pointed-Needle that stands out from  
the Hustt or Hose of a Grain of Corn, Grafs, *.etc.* and is  
call’d Awn, tor Beard. *Aiillers Dictionary.*

ARISTALTHAEA, ἀρισταλδμόα, from ἀειστος. excellent,  
and άλνὰνὰ the Marshmallow. A Name bestow’d on the  
*Althaea,* or Marshmallow, for its Virtues. -e. ..

"ARISTARCHI *Antidotus Paulina. An* Antidote of *Ari-  
starchus* call’d *Pouliria*; the Preparation of which you have in  
*Aetius, Tetrab. 2. Serm.* 4. *Cap.* 65. . .. '

ARISTEAS. Α Physician of *Rjoodes,* Author of one of  
these Antidotes in *Aryrepsus,* which are call’d. *Achuristi.* The  
Reason of this Name see under **AcnARIsToN.**

ARISTI *Emplastrum nigrum.* The black Pleister *A Arist us,*Ἀ famous Surgeon in *Scribonius Lurgus, Cap.* 8o. It is the fame  
as the *Tetrapharmacum. ': ' -*

ARISTIONIS ***Machinamentum.***. .A Machine for restoring.  
Luxations, invented by ***Aristion*** ; but seems to he no more than  
an improvement of the ***Giessecomum*** of ***Nymphiodorus. Oribas.  
de Machin. .. . . ......***

ARISTOGENIS ***Malagma.*** A Malagma ***for*** the Bones  
and Nerves, invented by ***Aristogenes*** ; the.Composition of it is  
describ'd by ***'Celsus, Libs esi Cap.*** I8:.. .

- ARISTOLOCHIA, Birthwort. Of this celebrated Plant  
there are many Species taken Notice of by Botanic Authors, aS  
the .......

***\* Aristolochia longa,*** Offic. & Doth Loin J. B. ***Longa vera,***C. B. Park. ***Altera radice pollices crassitudine,*** Caesalp. ’Αειςο.  
λοχία μακρα, Diosc. ***Aristolochia longa Italica sive masculas .***

The Roots of this Birthwort are large and long, often as  
thick as one's Wrist, and a Foot long; without Fibres till  
towards the Bottom, sending forth numerous square Branches,  
two Foot high or more; on which grow alternately, at the  
Joints, , yellowish-green Leaves, somewhat like the Leaves of  
Ivy, or rather those of black Briony, on pretty long Foot-.  
stalks: From the setting on these arise the Flowers, one at each  
Leas, which is made of one long and hollow Tuhe, with a long  
Flap at the End, of a brownish-yellow Colour, growing on  
.Foot-stalks, half an inch long, which are succeeded by roundish  
Pear-fashion'd Fruit, as big as a Walnut, containing flatfish,  
broad, roundish, brown Seed. . .

- It grows in ***Italy, Spain,*** and the Southern Parts of ***France,***find flowers in ***May. . .*** Ἀ

This Root is so call'd, because it is. esteem’d. excellent in  
promoting the ***Lochia,*** or Child-bed evacuations of .Women,  
aster the Foetus and Secundines are .expelpd. It is found in  
***‘Sicily,*** in ***Spain,*** and in ***Narbon in France.*** In ***Germany***. it is  
only found, in some Gardens. It is best when Of a Very close  
Texture, hard; entirely, free from Worms; externally of a  
greyish, and internally, of a yellowish Colour. . .

***Aristolochia rotunda, ver a et major,*** Offic. ***Rotunda,*** Matth.  
Ded. Lob. J. B. ***Vira,*** Trag. Cam. ***Prip.a,*** Caesalp. ***Rotunda  
vulgarior.*** Park. ***Rotunda sure ex purpura nigro,*** C. B. ***Malum  
terrae,*** Ga2. & Larg. ***Anistolochium,*** Hipp. ***Arist, rotunda Ita-  
lica.sive foernina. .Paracelsus*** calls it .the ***great .Matrix-rcot,***thecause it resembles the Matrix .of Women.. Its Flower also,  
as is said, bears an exact Resemblance to the Uterus.

The Root of this ***Aristolochia*** is thick and roundish, hard and  
tuherous, of a brownish Colour without, and yellow within, of  
a very bitter Taste. The Stalks grow to the Height of the  
former, fquare, and weak; the Leaves are .somewhat rounder,  
and grow on Very short Foot-stalks, winch seem to encompass  
ihe Branches: The.Flowers are, in Shape, like the former, but  
. of a dark-purplish Colour on the Inside ; the Fruit is likewise  
of the sarste Bigness with that, but more round. This grows in  
the same warm Countries, and flowers about the same time.  
***‘ Aristolochia adulterina, sive rotunda vulgaris,*** Offic. & Trag.  
Cam. ***Radix cava major.*** Doth Clus. ***CavAhcrbariorum,*** Lob.  
***Fumatia altera,*** Matth. ***Tubcros.aserve bulbofa, radice cava, major,***C. B. ***Radice cava,flore purpurascente,*** J. B. ***Radice cava major,  
store carneo.*** Park. ***Bulbos.a spuria store, purpurea et alba, radice  
cava,*** J. G. Volkham.. Flor.' ***Pfeudos.umaria bulbos.a, A. N.***Rivin. ***Pisto lochia concava,*** Fuchs. ***Capnos phragmites,*** Plin.  
μαπτὸς χελεδόνίας. ***Capnos- chelidonia,*** Lonicer. ***Capnos bul-  
bos.a, Capnicium chelidonium, Capnos latifolia, \_ Pseudaristo-  
Jochia, pes gallinaceus. : .. .\* .***

It grows, naturally in moist and shady Places; and is also  
found in Hedges, Vineyards, and shady Forests. It is also  
to be met with in some. Mountains, from whence it is trans-  
'planted into Gardens, ’ The Root is externally of a greyish, and  
internally of a yellowish-dark Colour, entirely hollow, and  
bitter to the Taste.. ’ si .

***Aristolochia longa nostras,*** Offic.. ***Tenuis,*** Koken Cot. Hort.  
-Med. Harmel. ***Lortga,*** Trag. Matth. ***Longa vulgaris.*** Cam. ***Sa-  
racenica.*** Ger. Doth ***Clematitis recta,*** C. B. ***Clematitis vulga-  
ris,*** J. B. ***Arist, altera radice tenui,*** Caesalp. Ἀριστολοχία κλημα-  
τίτις, Dios. . This Herb resembles the true ***Aristolochia lenga in***every respect, except that It bears Flowers that, are yellow, or  
os a brownish Black. It is sound sn a great many Pisces in  
***-.Germany, France,*** and ***Spain.*** In ***Germany*** it grows wild, and  
.is transplanted into Gardens ; but is os no Use. Ἀ

The Root of this Birthwort is much smaller .and flenderer,  
than the first or long Birthwort, running and spreading much in  
.the Earth; The Stalks are firmer, and grow more erect; and  
whereas the two former have hut one Flower at a Leaf, this has  
three or four, less than the other, but of the same Colour ; the  
.Fruit likewise .is bigger, and the Leaves larger and broader.

***Aristolochia,*** has always been had in great Esteem ; for which  
Reason ***Apuleius, sc. de Virt. Herb. Cap.*** Io. and ***Oribasius, de  
Heritor, et Simplic .Virtute, L.*** i. C. 5 .tell us, that Physicians  
cannot practise their Art successfully without it. In Apothe-  
.caries Shops, the ***Aristolochia lenga, et rotunda,*** are principally  
.used. They are of a warm, drying, opening, subfile, purify-  
ing, and healing Nature. ’ They are principally used in Dis-  
**eases** of the Head, Lungs, Liver, and Womb, - They purge

and drain the Cerebellum of cold Humours, and are of rerng-k-  
able Efficacy in Epilepsies'arising from the Uterus, ***Sam. Schon-  
horn .Man. Med. Pract.*** They are also good in Paines and the  
Cramp; they. diIl edge the gross Humours of the Breast and  
Lungs ; and greatly relieve those who labour under Disorders of  
the Lungs, ***Arnaldus de Villa Nova, Lib.*** 2. ***Breviar. Pract.  
Job. Fernel. Ls'S. Meth. Med.*** Y They also afford'Relief to  
Asthmatic Patients, ***Hi or. Reusuer. Obs. Mede*** I5I. in the  
Asthmatico-scorbutic, and those who are afflicted with Coughs,  
they fortify the Stomach, kill Worms, remove Obstructions of  
the Liver and Spleen, dissolve coagulated Blood, carry off Quo-  
tidian Fevers, ***si oh. Steph. Strobelbcrg. Rented. Seng, pro Curs  
Feb. Introd-.*** \_ They cure the Dropsy and Cachexy,- restore the  
Menses when obstructed, expel the dead Foetus and After-  
births ' The Root also of the ***Aristolochia longa,*** if sped to a  
Woman's Thigh, is said to hasten Delivery,'.End. ***Merc. L. psc .  
de Muiier. Affect. Cap.*** 8. ***et Lib.*** 4. ***Cap.*** 3. They ure Very  
serviceable for the necessary Purgaiion of the Matrix after Deli-  
very : They also allay excessive rains of the Womb aster Childr  
birth. TheV cleanse and cure internal Ulcers, Wounds, and  
inveterate. Runnings, especially of the; ***Pudenda.*** They  
destroy simgotisFlesh about the Lips of Wounds. Their Pow-  
der corrodes and wastes away mortisy'd Flesh, either in Ulcers,  
or in Fistulas, ***Gabr. Fallen. LA. Secret. P. Me*** 2x4. ***P. Bayr.  
Lib.*** I6. ***Pr. C. ζ. Adr. Toll. Comment, adPrax. Aur No. Slacker,  
L.*** I. ***C.*** I6. ***" Simon Pauli,*** only with the Powder of ***Arista-.  
" lochia longa,*** boil'd in the Water of Paul'S Betony, and ap-  
" ply’d in a Linen Cloth, in the Space of a few Days happily  
" consolidated a malignant Ulcer, which a Surgeon had in Vain  
" attempted to cure for the Course of a whole Yean". They  
purify the Skin, dissipate Blotches and the Itch, extract noxious  
Matter from Wounds or Ulcers, if the Juice of the Herb, or  
Its Powder, are apply'd to them.

.. The ***Aristolochia rotunda*** is possess’d of a Quality, by winch  
it cleanses the Filth of the Ears, and strengthens -the Hearing.  
***Matth. Grad. Pr. P.V. C.*** 34. ; It‘also opens internal Abscesses.  
They are also good against Poisons, and venomous Bites, ***Ciccra  
de DiuinaL*** I. ***Cap.*** Io. They ure also good in the Flague,  
and resist Putrefaction ; as Myrrh also does, ***Joan. Poesis. de  
Colonia, To.*** I. ***de Paste, Cap.*** I4. ***M, Unz. Antidot. pestilent.  
L.*** 2. . 'Tis also for this Reason they are added to the ***Theriaca.***The Powder of the ***Aristolochia rotunda*** is very successfully given  
in Cardialgias, and in Disorders of the Heart and Stomach,  
mix'd with Sugar of Roses; as also in a poach'd Egg, - or any  
other convenient Vehicle, ***Job. Camcr. in' Hort: Mnd.-p.-Q.i.***For " this Root is most-friendly to the Stomach, restores its  
" Ferment, assists Concoction, and powerfully-dissipates the

Malignity of the Humours. The ***Arisiolochia lenga*** is also  
"of singular Efficacy in removing PalnS of the Stomach.''  
***Gualt. Bruel. in Prax. Med. G.Hi Vilfch. Phil. r. Exce. Curat,  
et Obser.*** 439. The ***Rotunda,*** according to ***Sennertus, L. 5.  
Inst. Med. P.*** I. ***S.*** I. ***P. An et*** J. Heura. ***L.Ί. Meth, ad  
Prax. C.*** 8. opens internal Abscesses. The Root is also excel-  
lent in Clysters, exhibited to epileptic and apoplectic Patients.  
The distill'd Water of the ***Aristolochia lenga*** is good for the  
Gout and the Cramp, removes Belly-aches, cures beginning  
Dropsies, the Jaundice, the Failing-sickness, Rheumatic Pains,  
and Fevers. It cures ***Fistulas in Ano,*** and other Disorders ***os*** the  
genital Parts of Men and Womens .It is also excellent in the  
Plague.; The Extract of the Root of the ***Aristolochia rotunda***is also excellent for Oppressions of the Breast, and for those  
who labour under Disorders of the Lungs; in which Cases the  
following Pilis may be given:-

***' Take of*** the best ***Gum Ammoniac,*** reduced to Powder, one  
Dram ; well prepar'd Flowers of Sulphur, one Scruple ;  
mix with a sufficient Quantity os the extract of the Root  
of the ***Aristolochia rotunda vera,*** and make sixty-six Pilis,  
which shake in any proper Vessel, along with the Powder  
of the Root of ***Florentine*** Orrice. Of these let the Patient  
take eleven for a Dose. Or, -

Take of the best Gum Ammoniac, reduced to Powder, one  
Dram and an half; Root of the ***Aristolochia rotunda vera,'***reduced to Powder, half a Dram ; Finwers of Sulphur,  
half a Scruple r Mot with a sufficient Quantity of the

\* Extract of the Roots of ***Elecampane*** and ***Arisiolochia rotun..  
AAvera,*** dissolved in Spirit of Scurvy-grass. Make sixty-  
fix Pilis, and shake them in a Vessel, along with the best  
Powder of Liquorice-root. Let eleven of these he taken  
in the Morning fasting.

***-. Aristcl°chia*** also effectually corrects and removes all Corrup-  
tions, and Putrefactions os the Body, and answers the same  
Intentions that the Extract os ***Angelica*** does, ***Jo. Dan. Mylius,  
L.*** 4- ***Antidotar. C. 2.*** Vfe may also use a Decoction ***of*** the  
***Arisiolochia rotunda vera*** in scorbutic Coughs. ***FerrteUus,*** in  
***Dfspens.at. et Meth. Med. L.’y.p. M.*** T246. orders Pilis, made  
of the Root os ***Arisiolochia,*** for Epilepsies, for the Lame, and

fuch as labour under Disorders osthe Lungs, for Old Coughs,  
Obstructions of the Spleen and Liver, Diseases of the Kidneys,  
Obstructions of the Menses, Expulsion of the dead Foetus, apd  
the After-birth. Its distill'd Oil is highly Commended shr faci-  
litating Delivery, *ixs.Ephtm. Na C. Dec. 2. Ann.y,. Ohs. 2Cij.*A small Nose-gay made of *Aristolochia* accelerates the Menses.  
It also brings away the Foetus and Secundines, *J, Fernel.* i. 6;  
*Mesh. M. C.* 9. The *Aristolochia donga vulgaris* is an admi-  
rable Root, if mix'd with *Unguentum Populeum,* in the blind  
Haemorrhoids, *joh. Wittich. Fade Mecum, P. Me* 34I»  
*Aristolochia* burns, and applsid to the Haemorrhoids, puts a Stop  
to them, *j. Mat th. Grad. Pract. C. o.. P.* 2o. The Quintes-  
sence of the *Aristolochia rotunda* throughly cures any simple  
Wounds within the Space of twenty-sour Hours, and sooner;  
so that its Effects seem altogether miraculous, and beyond the  
Powers of Nature. It also cures deep and compound Wounds  
so quickly, that a Miracle rather seems th be wrought, than a  
Cure perform'd by it. It is successfully given to such as have  
fallen from Heights, or are in a languishing State of Health ;  
and alfo to such as have received internal Wounds. It discusses  
and dissolves grumous Concretions of Blood in the Stomach, or  
in any other Parts of the Body, *Barthol.* Zorn, *Botanolog.*

*Apuliius* gyves a whimsical Receipt, attended with many super-  
stations Ceremonies, for disinchanting those who are render’d  
impotent. It consists in washing the Patient with a Decoction  
of what he calls *Leontipodiors,* and. a subsequent Fumigation  
with the Heth *Aristolochia.*

The SERPENTARIA VIRGINIA, which see, is a Species of  
*Aristolochia. .*

By the Chymical Analysis, it yields a great deal of acid Li-  
quors. Oil, and Earth, a little urinous Spirit, and no Volatile  
concrete Salt.. Its fix’d Salt gives no Tincture of Yellow to the  
Solution of Sublimate; whence we may conjecture, that the  
Salt of the *Aristolochia* is much the same as the Salt of Coral  
would he, if one pour'd more Acid upon.it than is sufficient to  
saturate the Coral : Besides this, the Salt of the *Aristolochia*contains a littie *Sal Ammoniac,* and is involv'd in a great deal os  
Sulphur. *Martyris Tournefort.*

ARISTON, ἄριστον,’ Dinner. Ἀριςῳν, " to dine," in Hyp-  
*pocrates atccii* ἀρχ. ἰήΐρ. is opposed to μονοοςτέβν," to eat but once  
" a Day ; " which was at Supper-time. Those who eat twice  
a Day, took their *Ariston,* or Dinner, three Hours aster Sun-  
' rise.

*Ariston magnum et parvum,* according *ta.Aoisenna,* are Re-  
medies prepar'd against a Phthisis, Pains in the Belly, mix'd  
Fevers, *etc.*

ARISTOPHANEION, ἀριστοφἀνββν. The Name, of an  
emollient Plaister, which consists of sour Pounds of Pitch, two  
Pounds of Apochyma, (see ZOPIsSA) one Pound of Wax, an  
Ounce of Opopanax, and half a Pint of Vinegar. *Corraus,*from *P. As gin el. Lib.* 7. *Cap.* II. .

ARITHMOS, ἀριθμὸς, Number. 'Λριθμοἰ τῶν νουσημἀτων,  
*in- Hippoc. de Rat. Vict. inMorb. acut.* signify the numerical  
Differences of Diseases in Individuals, by which the *Cnidian*Physicians distinguish'd and number'd Diseases. The Passage  
runs, Ἕνιοι καὶ τῆς ἀριθμὴς εκἀστου τῶν νοσημάτων σάφα ἐθέλοντες  
φραίζβν, ουκ δρθῶς ἔγραψαν\* " Some, endeavouring to give us a  
" dear Account of the Numbers (numerical Differences) of  
" each Disease, have shewn themselves, mistaken.” This Place  
to me seems Very well clear'd by *Erotian,* when he says, Ἀειθμοῦς,  
τὰ ένόματαΐιτω καλεῖ\* " He calis the Names *Arithmi*;" for  
the Names of Diseases, by which they are distinguish'd and  
number'd according to their Differences, are plainly hinted at ;  
and therefore *Hippocrates* subjoins, Μήτ’ ώὓτὸ καὶ νουσημα δοκέβν  
ειναι, ἤνμητ ώῦτὸ όνομα ἐχ«\* Nor takes it for the same Disc  
" ease, unless it he call'd by the same Name."

ARLADA, ARLADAR. Realgar burnt, or calcin'd.

*Castellus. . ' -*

ARLES CRUDUM, in *Paracelsus,* are Drops stifling in  
*fane,* especially by Night; otherwise call'd *Hydatis. Paracels,  
de Grad, et Comp.*

ARMALA, in *P. AEginet. Lib. J.* the lame aS*.Harmala,  
Harmela,* or Wild Rue. SeeHARMELA. . ss

ARMARIUM UNGUENTUM, ὸπλόχρισμα. See  
HOPLOCHRISMA.

ARMATURA, Arab. *Anges.* The same as AMNIOS,  
which see. *Casteilus. .so*

ARME, ἄρμα, from ἄρω, to adapt, signifies, according to  
*Erotian,* every Coalition of Wounds in general ; but in *Galen's  
Exegesis,* it is particularly applied to the Suture of the Head.  
Ἀρμη, in *Hes.ychius,* denotes the joining together, or framing  
the Parts os the Body.

ARMeNA, Tniaputvmiin *Hippocrates,* signify- the .Instru-  
ments, with all the Apparatus, necessary sor an Operation in  
.Surgery, in *Lib. de Rat. Vict. in Morhe.acttt.* τὰ άρμενα in-  
cludes all the Apparatus sor Barbing ; and *Hefychius* expounds  
νύτάἄρμενα, in general, by τἀπρίς τι ὑπακείκύγήν πραγμα επιτή-  
.δ«α» " Such-Things aS are convenient for the Performance Of  
" any Work we are about."

**ARMENA** *Bolus.* **See BoLUs.**

. ARMENIACA MALUS, *Pracocia,* Ostim *Armatiaid  
Malus major.* Ger. I26O. Emay. I448. *Armeniaca, Malta  
Armeniaca,* Mont. 37. *Medus 'Armeniaca mayor.* Park. Parada  
579. Jons. Dendr. 74. *Armeniaca Mala majora,* C. Β. Pin.  
442: J. B. I. I 67. Raii Hist. 2. r5r4. *Mala Armeniaca,*Chain II. *Armeniaca fructu majori, nucleo amaro,* Tournr  
Inst. 623. Elem. Bot. 495. *Armeniaca Malus, fructu majori  
ex luteo rubescente,* Herm: Cat. Hott. Lugd. Bat. 5o. Boerbr  
Ind. Δι 2. 242. THE APRICOCK-TREe.

This. Tree is so well known, that a flight Description of it  
is sufficient: It has broad, round Leaves, pointed at the End;  
The Flowers are larger than those Of Plums, of a white  
Colour. The Fruit is round, and somewhat flat-sided, with a  
Sinus running on one Side from Head to Stalk ; of a yellowish  
Colour, with a Blush of Red ; when ripe, easily parting from  
the Stone, which is smooth like a Plum-stone, flattish, with  
three prominent sharp Ridges on one Side, with a bitterish  
Kernel within. It flowers in *March* and *April,* the Print not .  
being ripe, till after Midsummer.

Apricocks are os Very little Use in Medicine ; but are eaten  
as other Summer Fruits, being pleasant and grateful to the Sto-  
teach. They are frequently preserv'd with Sugar; and of the  
Kernels, infused in Brandy; is made the famous Cordial Call’d  
*Ratafia. Miller1 s Bot. Oss'.*

*Lerncry* adds, there are three Sorts of Apricocks; the first of  
which are pulpy, almost round, and grow aS big as a small *Peach,*stat on the Sides, one of which is of a dark Red, and the other  
yellowish. The Pulp is tender, pleasant, and of a good Smell;  
It contains a Very hard and flat Stone, wherein there is a bitter  
Kernel.

The second differs from the first, in that they are of a more  
whitish Colour, and that the Kernel is sweet;

.The third are smaller than the others,' but not so well tasted,  
and of a yellowish Colour. These last grow upon a Tree that  
is not cultivated like the rest. In chusing your *Apricocks,* take  
those that are pulpy, large, well-colourid, and well-tasted.

They moisten, create an Appetite, provoke Urine, are **a**Cordial, Pectoral, and promote Expectoration. An Infusion  
of Apricocks is look'd upon to he good to allay the Heat of Fc-  
Vers: They also say, that the Kernel of an Apricock kills **the**Worms.

Apricocks fill the Stomach with Wind, and easily corrupt  
there; and therefore they ought to he moderately taken. ’ ’

They contain an indifferent Quantity of Oil and essential  
Salt, and much Phlegm.

They are good, in hot Weather, for young People that have  
good Stomache, and of a bilious and sanguine Complexion.

Apricocks are Fruits of an agreeable Taste, and ufed more  
for Pleasure than Health. They cool and moisten, because  
’ they contain much Phlegm, intermix'd with a great Quantity  
of acid, essential Salt; and are fit to allay the Violent Motion  
os the Fluids; yet they create an Appetite, because'’this acid  
Sait lightly pricks the Sides os the Stomach. .

in the mean time. People ought to be cautious of this fort os  
Toed, which contains a Viscous and thick Juice; and some-  
times, in the Very first Passages, causes Wind and crude Hu-  
mones.

They preserve *Apricocks,* to render them more pleasing to  
the Taste, and that they may keep the longer. Being thus  
order'd, they are the less injurious, because their vifcons Phlegm  
is rarefy'd by the Sugar and Boiling. They are also more pecto-  
ral than raw Apricocks; sor, besides the oily and’ embarassing  
Parts naturally contain'd in them,- the Sugar, wherewith they  
are preserved, supplies them with other Qualities proper to  
mitigate the Sharpness of the Humours in the Breast.

You may extract an Oil out of them good for Noise in **the**Ears, for Deafness, and easing the Piles. *Lernery on Foods.*

.. The Summer Fruits, when crude and unripe, are extremely  
pernicious, and productive of Various Disorders; but when per-  
fectly ripe, perhaps nothing is inore wholsome or medicinal ;  
as, inthis State, they furnish a saponaceous juice, capable of  
resolving Obstructions. But as our Climate seldom ripens these  
to Perfection, it is prudent to boil, bake, or preserve them ;  
..because the Heat ripens them more, and destroys their elastic  
Ain, which is sometimes troublesome on the Stomach.

ARMENCS LAPIS. ? .

*Lapis Armenus,* Ossie. Cale. Musi-468. Geoff. Praelect. K76. Scluod. 346. .Worm. 66. Charlt. Foss 27. *Lapis Ara.  
menus Officinarum,* Woodw. Att. Tom. I. P. Io5. N. 26.  
*.Lapis Armenus,* Boet.292. Matth. I 352. *Armenium,* Schw.  
366. AldroV. Mus. Metalli 35I. *Ascuturn, five cteyuleum  
Fessele, NLnt.* Pin 2I8-. ARMENIAN STONE, *pier Wood-  
warssurn,* COPPER ORE OF A SKY OR PALE-BLUE  
COLOUR mi -- EE

The *Armenian* Stone B opake, with green, blue; Or blackish  
-Spots, smooth, and marked like the Azure stone, with gold-  
.coloured Specks, and friable. There is indeed but very little  
Difference hetween the two Stones; they being often found in  
the lame Glebe, and used indifferently for each other, as having  
the same Virtues; only the *Armenian* Stone is more stronaly

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purgative. It is given from six Grains to a Scruple; and, ex-  
temally used, it is detergenti with some Degree of Acrimony  
and Styptioity, It is very seldom used in Physic; but the Painters  
employ it in making a beautiful blue Colour, with a greenish  
Cast. *Geoffroy.*

*Alexander Trallianus* prefers the *Lapis Armenus 'to* white  
Hellebore; as a Purge, in melancholy Cafes.

ARMERIA, *Lychnis stare laciniato,* Mont. Ind. 37. *Arme-  
rius pratenses.* Ger. 480. Emac. 6oo. *Armerius silvestris,*Merc. Bot. I. 21. Phys. Brin Io. *Armoraria protensa mas.*Men Pin. II. *Lychnis plumarea fylvestris /implex.* Park.  
Pared. 253. Raii Hist. 2. Iooo. Synop. 3. 338. *Lychnis  
pratenses,store laciniato strnplici,* Hist. Oxon. 2. 537. Tourn.  
Inst. 336. Elem. Botr 281. Boerh. Ind, A. 213. Dill. Cat.  
Gissi 69. Rupp. Flor. Jen. 92. Buxb. 200. *Caryothyllus  
pratenses, laciniato store strnplici, five Flos Cuculi,* C. Bi Pin.  
2Io. *Flos Cuculi, Odentis quibufdam,* J. B. 3. 347. *Flos  
Cuali, Odontitis Plinii,* Chain 445. MEADOW-PINK.

It grows in watry Pisces, and flowers in *May* ; the Flowers  
are in Use. It is a good Alexipharmic, and commended against  
Poison. *Dale.*

ARMILLA, that circular Ligament which comprehends all  
that Multiplicity of Tendons which belong to the whole Hand  
within a Circle in the Region of the Carpus, and is easy to be  
divided into several others, for which Reason some make two  
of them, one encompassing the Imide of the Carpus, which is  
broad and strong, and holds together all the Tendons of the  
.Mufculi Flexores , the other, on the Back of the Carpus, con-  
sists of six lesser ones conneoled to one another, and rolled  
about the Mufculi Extensores, like so many Rings. *Castellus.-*

ARMONIACUM, the fame as AMMONIAcUM, which  
see.

ARMORACIA, Offic, Sctirod. *Raphanus fylvestris. Get.*.I85. Emac. 240. *Rapistrum album articulatum.* Park. Theas.  
. 863. Raii Hist. I. 805. *Rapistrum stare albo, stliqua articulata,*-C. B. Pin. 95. *Papists urn store albs.* Men Pin. I 03. *Ra-  
pistrum store Erucae foliis,* Merc. But. I. 64. Pryt. Brit. I03.  
*Rapistrum store albostriato. Sinapi agreste album Trago,* J. B. 2.  
852. *Rapistrum store albostriata.* Chain 273. *PAphanistrnrn  
store albs seriate, jiliqua articulata striata minore.* Hist. Oxon.  
2. *266.* Tourn. Insi. 23o. Elem. Bon 197. Boerh. Ind. A.  
2. 2I. Dill. Cat. Giss. II6. *Paphurastrurnstliquci articulata  
glabra, majore et minore.* Rail Synop. 3. 296. WILD RA-  
DISH: '

It grows amongst Com, and flowers in *June.* The Root  
is in Use.. It warms and dries. It incides mucilaginous tar-  
tareous Concretions ; it attenuates, resolves, opens Obstructions  
of the Viscera, is 'diuretic, lithantriptio, and anriscorbutio.  
*Dale* from *Schrod.*

ARMORUM PUGNA, a fort of Gymnastics - This hind  
of Exercise, fays *Oribastus* from *AMsillus,* was not in Use  
among the Antients as a Remedy, but was invented by the  
*Romans,* principally with a Design to promote the military Art,  
and is now received among the Gymnastics.

The Patient, who is supposed to prepare himself for a Duel,  
puts on military Armour, and engages with an Adversary, or  
sights against a Pillar.- .st'-

This Exercise is proper to render the Body more fit forMo-  
tion, and to increase Flesh , but it tends to make the Flesh  
.foft and loose, and is noxious to the Head, which suffers as  
. well on account of its being so closely stmightened and covered  
with the Cap and Helmet, as by the Weight with which it is  
Oppressed But this sort of Gymnastics mightily professes and  
promifes to procure us the Benefits of a long Breath, and Firm-  
ness of Body, since they-who are inur’d to it may very well  
hear any other Exercife that requires much Breath. *Oribase  
. Med. Coll. Lib.* 6. *Cap.* 36.

ss ARMUTHEUS LAPIS, corruptly written for Arme-  
. NIUS LAPIS, by *Nachepsas. Aecius Tetrab.* I. *Serm.aL. Cap.*' 47.

ARNABO, a Name for Zedoary. See **EEDOARIA.**

; .. ARNACIS, ἀρνακις, in *Hippocrates asiei inrnurnas&,* is a  
rLarnbikin.with the Wool.

ARNALDIA, the Name of a malignant, stow, and chro-  
nical Difeafe, formerly pretty common in *England,* and usually  
attended with an *Alopecia,* whence it. seems to be a kind of  
*. Lues Venerea. Biancard.*

'.W ARNICA, a Species of D0R0NICUM, which see.

ARNOGLOSSUM; ἀρνογλωο,ον,-from αρςν a Lamb,-and  
γλώπαρ a Tongnei lonmb’s-tongue, a Name for Plantain.  
-See PLANTAGO. - -

YSAROEIRA, a Species of the Lentisit; See LENTIscUs.

AROHOT, Mercury. ' *Rulandus. - -— - - - -*

AROMA, αρωμα. Itsignifies any thing fragrant Or odorous;  
. but is sometimes taken for Myrrh. ... .

... AROMATICA, ἀρωματικἀ,-from ῆςωμα. a Word apply’d  
to all fragrant Things, whether Spices, Herbs, Flowers, Seeds,  
-cr Roots. It is remarkable, that Aromatics, or Spices, preserve  
Animal Substances from Putrefaction , and that Providence has  
..taken cute to furnish warm Climates with Plenty of Aromatics,

which the Inhabitants make frequent Use of, and probably  
thereby check that spontaneous Tendency to Putrefaction, to  
which Heat inclines them.

-- AROMATICUM ROSATUM. *Rose Spice.*

Take of exungulated red Roses, fifteen Drams; of Liquorice  
sticed, feven Drams; of Aloes Wood, and yellow Saund-  
ers, each three Drams, of the heft Cinnamon, five Drains;  
of Cloves and Mace, each two Drams and an half; Gum  
Arabic, and Tragacanth, each eight Scruples; of Nut-  
megs, the greater Cardamoms, and Galangais, each one  
' Dnam ; of *Indian* Spikenard, one Scruple; and let them  
all be reduced into a Powder to he kept for Use.

This Medicine is frequently used in Cafes where there is Soo  
great a Quantity of watry and superfluous Matter in the Sto-  
mach. It contributes to the Concoction of rhe Food, pre-  
vents Putrefaction, corrects the Relaxation of the Stomach, re-  
moves Weakness, strengthens the whole Lower Belly, and Or-  
gans of Nutrition. It dissipates the Flatulencies winch distend  
the Stomach, 'restores the lost Appetite, removes Nauseas,  
and is surprisingly heneficial to thofe who labour under Disor-  
ders of the Stomach. Besides, it very much refreshes those who  
are recovering, or have lust got the better of any long and  
tedious Illness. *Zaeuelser Nat. in Pharm. August. ,*

AROMATITIS, άρωματίτις. a precious Stone, of a bitu-  
minous Substance, in Colour and Smell resembling Myrrh,  
whence it takes its Name; it is found in *Arabia* and *Egypt,  
Gorraeus.*

AROMATOPOLA, ἀρωμάτοπώλης. from ἀρωμα. Spice,  
and πωλέω, to sell. A Druggist; also *a.* Grocer. *Blanc.*mi ARON, ἀρον. See ARUM.

i ARONIA.

*Mespilus Aronia,* Ossie. *Mespilus Aronia, Azarolus,* Mons.  
Ind. 48. *Mofpilus Aronia,* Ger. I263. Emac. I454. *Me.  
/pilus folia laciniato, spinofa, fructu majari eseulento.* Rail  
Hist. 2. I458. *-Mespilus Aronia veterum,* J. Β. I. 67. Chub.  
3. *Mespilus Aronia, five Naapalitana,* Park. Theat. I 423.  
*Mespilus Apii folia laciniate,* C. B. Pin. 433. Jons. Dendr.  
44. Boerh. Ind. A. 2. 256. Tourn. Inst. 64I. Elem. Bot.  
503. THE NEAPOLITAN MEDLAR.

It is sown with us in the Gardens of the Curious, and stow-  
ers in *May.* The Fruit is in Use. It binds the Belly mode-  
rately. *Dale... so*

AROPH of *Paracelsus* are either Flowers very finely pre-  
pared after a Chymical way, by Sublimation of equal Portions  
of Lapis Haematitis and Sal Ammoniac ; or the Word signifies  
Saffron and Bread moistened with Wine, and inclosed in a Ves-  
sel clofely stopped, and set in Horse-dung for some Days,- and  
afterwards distilled, *Hclmsnt.de Lithiast. Paracelsus* asso speaks  
of *Aroph* as a Thing prepared by Distillation, and endued with  
a Virtue of destroying rhe Operation of the Kidneys, *De  
Vir. Mends. Lib.* 2. *Cap.* Io. *Aroph* also signifies a Mandrake.  
*Ruland. Johnse* Some take *Aroph* to he one of *Paracelsus^*Terms of Art, by which he intends to signify a Lithontriptic  
Medicine, and have expounded it by *Aroma Philosepkoram,  
Hebnont. de Lithiast, Cap.* 7. Na. I4. ..

ARQUATA, the Name of a Bird mentioned by *Aldravan..  
dus.* It is called τροχῖλος by *Oppian.* A Wren.

ε ARQUATUS MORBUS, the same as IcTBRUS, which  
fee. . ' , .

ARQUEBUS ADE (Eau.de) the same as *Aqua Sclspetaria.*See AQUA.

-ARRAPHON, ἀῤῥαφον, from *a.* Negative, and ῥἀπτω, to  
sew. Without Suture; the Word is applied to the Cranium,  
whin naturally without Sutures. ‘ Io this Case the Person has  
sometimes an inveterate and incurable Head-ach.

ARRHEN.. ARSEN, *ifgir,* ἀρσην, Male:

ARRHCEA, ἀῤῥοία. άῤῥοίη, from α Negative, and ῥέω, to  
flow. The Stoppage of a Flux, and by *Hippocrates* appropri-  
ated to the Suppression of the Menses;, for ἀῤῥοία. in *Galensc*. Exegesis, is έποχὴ εμμηνων, "‘the Stoppage of the Menstrual  
uFlux.”. μ - ' ‘ -

ARRHOSTIA, αῤῥώστημα, *seduria,* from α Negative, and  
δώννυμι,-to he in sound Health. . Infirmity, Weakness; it often  
signifies a Difeafe, as in 2 *Apli.* 3I. and 3 *Apb.* 5. -

e- ARRHYTHMUS, αῤῥυὑμος. See ARYTHMus.

ARSACUM, the fame as AcRAi, which fee.  
ARSALTOS, the fame as AspHALTos, which see.  
ARSANECK, Arsenic sublimed. *Johnsen.*

ARSATUM, the fame as AcRAI, which see. \_  
ARSENICUM, Arsenic. Of this there are three Sorts:

**... ARSENICUM ALBUM,** Ossic. Ind. Med. ,13. *Arsenicusp  
factitiam album, -* Aldrov. Mus. Metal!. 354. *Arsenicum,*Mont. Exot. I2. *Arsenicum album seu crysealsmuat,.* Sehrod.

-3. 498. - *Arsenicum album, Risagallum, quibufdam Realgar,*Worm. Musi 29. Cherlr. EofL 13. WHITE ARSENIC,  
or RATSBANE.

**ARSENICUM FLAvUM, Ossie.** *Arsenicumsactitium.jstcruum,*Aldrov. Musi Metall. 358. *Arsenicum citrinurn feu stavurn,*Schrod. 3. 493. *Arsenicum citrinum.* Pharmacopolis. YEL-  
LOW RATSBANE. . .... . . . ’ ‘ -

**ARSENXCUM RUBRUM** *facticium,* Offic. Woodw. Att. a.  
Ρ. I. *p.* 50... RED ARSENIC. *Dale.*

*Arsenic,* properly so called, is a Substance extracted from an  
Ore found in *Saxony* and *Bohemia,* named *Cobalt.* It is of three  
Kinds, Crystalline, Yellow, and Red and aS this Original of  
Arfenic, and the way of preparing it, are hot commonly  
known, I shall here shew what is the Nature of Cobalt, and  
in what manner Arsenic, and the other Substances sound with  
it in the Ore, are extra died, also whet are the Kinds of facti-  
tious or artificial Arsenic.

German Cobalt of the Shops, Cadmia Metallica of *Agricola,*is a ponderous, hard, fossil Substance, almost black, not unlike  
Antimony, or some Kinds of Pyrites, emitting a strong sul-  
phureous Smell when burnt, often mixed with Copper, some-  
times with Silver. It is dug out of Mines in *Saxony,* near *Gof-  
lar* ς in *Bohemia,* in the Valley of *Joachim* ; and in *England,*in the *Mendip Hills,* in great Quantities. It has so strong a  
corrosive Quality as sometimes to torn and ulcerate the Hands  
and Feet of rhe Miners, and is a deadly Poison for all known  
Animais. All the three Kinds of Arsenic are extracted from it;  
and it likewise ferves to make Zaffera, ufed by Potters in giving  
a blue Colour to their Vessels; and the Encaustum Coeruleum,  
or that kind of Blue sometimes used by Painters, and often by  
Women to nain with their Starch, for whitening and stiffening  
Linen. The way of making all these, is taught by *Kunkel,* in  
his Art of making Glass. To this Purpose they put the Cobalt,  
in a calcining reverberatory Furnace, made for that Purpose in  
such a manner as that'the Flame may just graze upon the Ore,  
and fo 5et it on Fire. The Flame of the Ore is blue, accorn-  
panied with a copious Smoke, which is received on the Cieling  
of the Furnace, and from thence conveyed out through a large  
Funnel made of Boards, and above an hundred Elis in Length;  
but the greatest Part of it sticks to the Imide of the Funnel, in  
form of a whitish Soot ; and every six Months the Labourers  
fweep the Funnel with Brooms, and carefully preserve this Soot,  
which afterwards serves to make both crystalline, yellow, and  
red Arfenic.

Crystalline Arsenin is made only by sublimating the Soot in  
Iron Veffels into an opake Substance, fometimes white and  
staining like the Encaustum Alburn, fometimes streaked with  
red and crystalline Veins.

Yellow Arsenic is made of the fame Soot sublimed with  
common Sulphur, in the Proportion of one Part of Sulphur to  
ten of Soon The sublimed Mass is of a yellow Colour, solid like  
Sulphur, shining, and not altogether opake, easily broken,butnot  
friable, oY easily crumbled into Dust, and distinguishable from  
Orpiment, by not taking Fire when thrown upon burning Coals,  
as Orpiment presently, does. Red Arfenic is made of the fame  
Soot and Sulphur, mixed with a small Proportion os a metallic  
Substance, called the *Spurna of Copper.* The sublimed Mast is  
solid, of a cinnabarine Colour, and opake.

The calcined Cobalt, after the Evaporation of the Fumes or  
Smoke, is powdered and calcined again, and this Operation is re-  
peated till the Calcination is judged to be perfect. Then being  
very finely powdered, it is mixed with two or three times the  
Quantity of powdered Flint Stones, and moistened with a little  
Water in large Tubs, where, in a very short time, it becomes  
a solid firm Mass, called *Taffera,* as already said, which is  
used by the Potters, Glass-men, Enarnellers, *etc.*

If two Parts of calcined Cobalt, one Part of Pot-ash, and  
three of common Sand, be melted together, a vitreous,  
epake, bluish Mass is produced, which is ground in Mills  
to a very sine blue Powder, which is called *Smaltum,* or  
Encaustum,Coeruleum, used by Painters, and in washing  
Linen. '

Arsenin consists of an acid Salt, and a kind of mercurial or  
metallic Substance, which discovers itself when it is distilled in  
a Retort, mixed with Soap, Suet, Oil, or any fat or oily Sub-  
stance; for with a strong Degree of Fire the Arsenic will he  
raised into the Neck of the Retort in a metassic Form, like  
Antimony. Tine Sulphur contained in Arsenic is in so small a  
Proportion, that it does not flame when cast on burning Coals,  
though Cobalt contains a great Quantity of Sulphur, which con-  
sequently has heen separated from the arsenical Parts in the  
Calcination and Deflagration, and so evaporated; het the Smell  
of Arsenic proves, that some Sulphur still remains in it. Arse-  
nic is very volatile; for if any Quantity of it is pat into a  
Crucible, and set over the Fire, it will presently evaporate in  
white Fumes, without leaving any Remainder. If melted,  
stratified, or cemented with Copper, it turns it of a Silver Co-  
lour ; but, as it impairsits Ductility, this Change of Colour is  
rendered of no Use.

Arsenic is a powerful Corrosive, and reckoned among the  
strongest Poisons. When taken inwardly, it causes many bad

Symptoms, - of which some are common to it with other Pot-  
Ions; such as Anxieties, Swoonings, Palpitations, a funded  
Dejection, or Sinking of the Strength and Spirits, Stupors, Din  
lirrums, convulsive Motions of the Limbs, Palsies, Heat and  
Corrosion of rhe Fauces, Thirst, Fevers, Vomiting, Pain in  
the Stomach, and cold Sweats. Other Symptoms are peculiar  
to this Poison, such as not only ari Erosion of the Stomach, hut  
an Extenuation of it, in such a manner, as drat all its Coats,  
taken together, shell not be thicker than a Poppy-leaf in many  
Pisces ; and at tho saine time, the small intestines are sound  
corroded and perforated; a sudden Swelling and Sphacelation of  
the Parts *os* the Body; and, after Death, a more fpeedy Pu-  
trefaction than is observed in other Cafe, especially in the  
Parts of Generation belonging to Men. If Death does not  
immediately follow, the Patient becomes afflicted with an Hectic  
Fever, Marasmus, Palsy, Tremors, and sometimes Madness.  
Some recommend Rock Crystal reduced to an impalpable Pow-  
der, as an Antidote against Arsenic ; but I should depend much  
more upon drinking large Quantities of Milk, Oil, or fat .  
Broths, while the Poison remains in the Prims Vise; but after  
it has got into the Blood, akxiterial Medicines are to be used,  
fucb as *Venice* Treacle, Mithridate, Bezoar, Powder of Vi-  
per», Contrayerva-root, and such like, and afterwards a Milk  
Diet. . ..

Though Arsenic be a quick Poison for both Men and  
Brutes, it is recommended by sonic in intermitting Fevers ;  
hut, let it he never so much prepared and corrected, its delete-  
rious Qualities are only lessened, never wholly removed ; and  
therefore, though it may be a good Remedy for the present, it  
will afterwands prove a Poifon, and bring on very dismal Sym-  
ptoms. Arfenic therefore, in my Opinion, is worse than the  
Fever itself; and among all the Preparations thereof, there is  
but one which I can recommend, oven to be used externally:

Take crude Antimony, yellow Sulphur, and crystalline Arse-:  
nic, of each two Ounces; powder and mix them whll in  
a Glass Crucible, and melt them in a gentle Sand-heat,  
r till they come to the Consistence os Pitch ; and, the Fire  
being removed, they will concrete into a Mass of a dark.,  
red Colout, which is to he kept for Use.

This Medicine is only to he applied externally, as heing a  
toild and gen de Caustic, and thought to he endued with a Potver  
of attracting poifonous, or other morbific Matter from the Centre  
of the Body to the Surface, like aLoadstone; and hence it has the  
Name of the *Arsenical Magnet.* It is also raid to be a power-  
sul Ripener, and is therefore applied tOVenereal Buboes, with  
the *Emplastrum Diachylon Magnum.* It is an Ingredient in the  
*' Emplastrum Magneticum* of *Angelus Sala,* and recommended  
for maturating and breaking Venereal Buboes, and is thought  
to draw the pestilential Virus out of them. It is likewise  
proper in fcrophulous Ulcers, which it opens, cleanses and  
incarns, without the Assistance of any' other Ointment. *Geofo  
strop.*

After giving the Opinion of *Geoffrey* with respeif to the in-  
temal Use of *Arsenic,* 1 need not caution the younger Pra-  
ctitioners in Physic to hold as fuspecled the Advice of *Pitcairits-*who directs *Arsenic* to be given internally in a Dysentery;  
and of *Tacutus Lasttanus,* who advises the Use of it in Clysters,  
for the fame Distemper. ' . . . .

*Realgar* asso is called *Arsenicum,*' and *Sdadarachd.* See  
**REALGAR.**

ARSlORA, Ceruss. *Jobnseu.* t. ῖ

ARTABA, ἀρτμόε. An *Egyptian* Measure of dry things,  
containing five Modii (somewhat above five *Englise* Pecks)\*  
*Galen, de Mansuris.*

ARTANECK, ARTANECH, Arsenic. *Rulandas.*ARTEMISIA, a celebrated Plant, thus distinguish’d :  
*Areemisca,* Offic: Chab. 375. *Areemisca vulgaris, j.* B. *it*184.' Rail Hist. I. 372. Synop. 4. 190. Park. 9o. *' Areemisca  
vulgaris major,* C. B. Pin. I 37. *Artemista latifolia vulgaris  
major.* Hist. Oxon. 3. 5. *Artemista vulgaris maser, saule et  
store purpurascentibus, et albicante.* Touch. Inst. 460. Boerh.  
Ind. A. I27. *Artendsea mater herbarum.* Ger. 945. Ernac.  
IIO3. MUGWORT *Dole.*

It is also called Mater Herbarum by *Lobci,* and Parthenium  
by *Apuleius.*

This is also called *Cingulum Soncti Johannss,* because a great  
many People foolishly imagine, that, if they make a Crown of  
it, wear it upon St. *Johrce* Eve, and throw it into the Fire,  
mumbling some Verses, they shall for that Year he free from  
Spcctses, Direafes, and Misfortunes. Others call it the Herba  
Regia, Toxitesia, Anactirrium, Sanguis Hominis, or Rapium.  
The famous Queen *Artemista* with this Herb cured feveral  
Diseases; for which Reason *Pliny, L.* 25. *C.* 7. thinks it had  
her Name bestowed upon it. But others imagine, that if was  
called *Artemista* from *Artemis,* that *m, Diana,* since the antient  
*Pagans* believed, that the Goddess *Diana* presided over the Dis-  
eases of Women, which they thought could not be cured with-  
out this Herb. The Priests, according to *Apulcics, Herb.*

*C.* Ict called it *Pubasteocordicem,* that is, the Heart Of *Buia-*stus. Now.Z?testes/?us wasaTOwnin .Egypt, in winch the Wor-  
ship os *Diana,* and os *Dogs,* mightily prevail'd [according to  
*Hirodot. in Eutcrp. L.* 2.J ; to this therefore answers pretty  
well the ἀρτεμισία, that is, the *Dianaa* os the *Greeks , for*Ἄρτεμις is *Diana.* It is not material whether the Virtues of this  
Herb were first discovered by Dogs, who are Lovers of it, and,  
according to *Antonius Musia,* use it aS a Medicine against their  
natural Distempers, or whether they were first found our by  
*Diana.* See ATHAN. KIRCHER. *Oedip. AEgypt. Tom.* 3.  
jo 72. .

Mugwort has many large winged Leaves, very much tom,  
or cut in, even to the middle Rib, green on the upper Side,  
and white and hoary underneath ; os a pretty strong Smell, if  
rubb'd between the Fingers; the Stalks grow to he two or  
three Feet high, chanell'd, in some Plants of a hoary Green,  
in others os a purple Colour, full of a white Pith, and having  
smaller Leaves, growing alternated. The Flowers are small,  
round *Corymbi,* yellowish, with a Cast of Purple, standing up-  
right, and not hanging down like Wormwood. The Root is  
tough and (lender, running astant in the earth, shooting out  
many white Fibres. It grows in Hedges, and waste Places,  
and flowers in *funes*

This Herb is universally known, and is the true *Mother-herb,  
or* Herb for the Matrix; for the Coldness of which it is an ad-  
\*mirable Remedy. It also purifies, warms, and fortifies ; it  
appeases the Pains to which it is subject, and cures the Green-  
sickness, promotes the Menses, expels the dead Foetus, and the  
Secundines, if used either externally or internally. *Helrnont*says, that the Tops of Artemisia cut, and given to Women,  
' stop the Menses; but that its inferior Parts cut, and exhibited,  
promote them. However, all the Diseases of Women, arising  
from the Matrix and Menses, may be cured with it. It is the  
grateful Reliever os Women in Child, birth, and os such as la-  
bour under any Disorder incident to Women, *fob. Mech.  
Fher. de Scorzoner. p.* I2. It also cleanfes the Liver when  
obstructed, purges the Kidneys of Gravel, promotes Urine,  
and removes the Strangury, and Pains of the Belly. It also  
resists Poison, arid purifies a pestilential Air, *Ambr. Paraus  
Chir. L. Q.i. de Peste, C.* 25. *Casts. Schwenks. L.* I. *Cat al.  
Stirp. Siles.* When boiled in Wine or Water, and taken for  
forty Days successively, one or two Ounces for a Dose, in the  
Morning before Breakfast, it cures the Dropsy and Jaundice.  
***C.*** *Raygerus* says, he saw a dropsical Patient throughly cured of  
bis Disorder by drinking an Infusion of red Artemisia in Wine,  
*Cbs. Med.* 5I. *in Schol.* Its juice drank with White-wine,  
*et* with Water os Maiden-hair, cures the Jaundice; To. *Matth.  
Grad. Pract. p.* 2. Co 8. It is also good for Wounds, and  
often rank'd among the other Vulnerary Herbs. It is also good  
for the Bites of Serpents and Scorpions, especially when drank  
in Wine, or apply'd immediately to the Wounds. This Herb  
is also excellent in gun-shot Wounds; in which Case the Herb  
is taken fresh, triturated with White-wine, its Juice express'd,  
and two Spoonfuls of it given twice a Day, pouring at the same  
time a littie of it into the Wound. It also takes away the Pain  
Occasioned by the Heat of the Powder. When the Heth can-  
not he had fresh, it is usual to take the dry, and boil it in an  
equal Quantity of Wine and Water, of which they give the  
Patient to drink. Morning and Night; they also wash the  
Wound with it. *Th. T.abernarnontanvs,.* in the Siege of  
*Obetz,* and in a great many other Campaigns, acquired a Very  
great Reputation by means of this Medicine, and assures us,  
that it never sailed him. Those who have the Gout should eat  
the Root of this Heth, which will in a short time relieve their  
Pain. *Abrahamus Scilerus, Consil. inter Cratoniana,* 235.  
affirms, that many have been freed from arthritic Pains only by  
ufing the Roots of *Artemisia* boiled in their Victuals, like  
. Parfley-rootS. See also *Ann. Weckard, These Pharmacetit. Li* 3.

***C. 2..*** Artemisia beat with Axungia and V inegar cures Pains os  
the Thighs, is appty'd to them, *P. Bayr.* Z. IS. *Pr. C.* I. *ana  
6. C. V. Schneider. Lib. de Catarrh. Specialises. T.r. de Anthrit.  
et Podagr. p.* 848. Some others, as *Crato, L.* 2. *Cons.* 26.  
*Schenck. L.* 5. *Obs. Med. Solenander, Cons. Med.* 24. *S.* 4.  
advise, in order to remove Pains in the Feet, to bathe or foment  
. them with a Decoctinn Of this Heth. For this Purpose also

*Ant. Mixaldus* commends the *Oleum Artemisiae, Cent.* 5. *Mentor.  
Aph. ycy.* An old Woman is, by *Simon Pauli, in Ssuadr. Bot.  
Classe.* 3. said to have throughly carried off cedematous Swellings  
in both her Knees, by applying to them folded Cloths, sumi-  
gted with *Artemisia.* This Herb, when boiled in Wine, with  
hamomile-fiowers, those of Sago and Rosemary, fortifies and  
restores maimed and refrigerated Limbs, if fomented with the  
Preparation. It is said, that if People who travel on Foot put  
some of this Herb into their Shoes, they will not so soon he-  
Come weary, as they would otherwise do. Travellers who  
carry *Artemisia* along with them, will not become weary on  
their Journey, says *Plsny, N. H. L.* 26. *C. I5.* and *P. Bayr.  
L.* 24. *C.* I 3. But *Matthiolus on* this Occasion observes. *Let  
who will believe it ; for I cannot. Theodor. Tabcrnamontanus  
says,* he helieves it very readily, *provided the foumey be very*

*Jbort. Cas.p. Hijfinan, L.L. de Mod. Offic. Cap. 22. Sect. 4.*mentions it as a Piece of Superstition; and wittily .says, he will  
not soon weary, who has in his Journey *Beys.us,* which is the  
*German* Name of *Artemisia,* and signifies at the same time *an-  
arbor Foot* ; that is, adds he, the four Feet of a *strong Horse.*But though this Opinion savours of Superstition, yet 'tis true,  
that a Bath of *Artemisia* restores Strength and Soundness to Feet  
weakened and galled by Travelling. SeeGorop. *Becan. Hcrma-  
then. Libs sop.* I 35. *David Frolichs Viator. P.i. L. 2. Coy.  
Honorat. T.abcr. de Plantis, Tr.* I. *L.* 2. *Chr. Fr. Paulin.  
Pant i.* 726. *Simon Paul, ^surest. Bolan. L. C. Avisenna*confirms this, who asserts, that it is an Herb of a cold Nature,  
and is of wonderful Efficacy against Weariness. *Philadamon,  
L. de Fuga Isidic,* also asserts, that this was used by *Isis* against  
Weariness, when wandering through *Egypt* in Quest or the .Bedy  
of *Osiris.* Some superstitious People pull up this Heth, and dig  
under it at a certain Time and Hour, especially on St. *John's*Eve, for *Coals,* which they use against the Fever, the Plague,  
the Faffing Sickness, Witchcraft, and other Disorders, tying  
at the same time the Heth about their Necks. The *lVirtem-  
berg Pharmacopoeia* affirms, p. 22. that if on St. *John's Eve,*hesore .the Rifing of the Sun, People dig under the old Trunk of  
red Artemisia, they will find a black Coal, which, if hung  
about the Neck, is good against the Falling Sickness. *Jobs  
Chemnitius, Ind. Plantar. Brunfuic. p. sq.* mentions its being  
sold in some Apothecaries Shops as an Amulet to cure Fevers.  
*Tragus,* on the contrary. *Part* 2. *Hebr. Costs* I3. and *Jo. Bau-  
hins, Hist. Plant. Univcrs. L.* 26. *C.* 78. call these Coals the  
Stones os Fools, because they are sought sor by weak and foolish  
People ; but *Mich. Etmullen, Comment, in Schrod. Pharm.  
Sect.* I. *et in Ludovic. Pharmae. Tit.* I4. and in *Colleg.  
Practic. C. de Epileps. P. M.* 887. inorms us, that there is  
nothing either sabulous or superstitious in what is reported of  
that Coal; and that it was an infallible Remedy against the  
Epilepsy, which a certain Woman in *Leipsic* had sound verified  
upon her own Son. *Christopher Helwig, in Consil. Medic, de.  
Poste, p.* I 39. says. For my share, I look upon this Stone as  
something miraculous: However, I will not Venture to assert,  
that there is no such thing, fince a great many People, who  
cannot be charg'd with Folly, have given Accounts of Very fur-  
prising Effects produced by it. *Femelius* is, in my Opinion,  
sar from being a Fool, yet in his *Console pro Epileptico prascripp.*he commends that Stone hung about the Neck against the Epi-  
lepsy. See also *Anton. Mixald. Cent.* 3. *Mem. Aph. io. Cas.p.  
Bauhin, in Mattbiol.* p. 6I9. *Esihem. N. Co Dec.* 3. An. 9. and  
Io. *Obs.* I28. *Ofw. Gabelbhrver, p. in.* 24. *Hi Petraei Dif-  
fert. Harm. L.* I. *Disc. 6. Sect.* 53. *Fr. Juel, Oper. Mast.  
Lib.* I. *Sect.* 3. *de Epilepsia. Fr. Decker, Not. ad Prax. Med.  
Pauli Barbett, L.* I. *C.* I. *T.h. Mayern. Prax. Med.* Z. I.  
Co 3. *G. Hi Vilfch. ChU.* I. *Exot. Cur.* 5o5. *et Hecatost. 2.  
Obs. Med.* 40. The Roots of Artemisia may he kept and pre-  
served for a great many Years, in some foreign Apothecaries  
Shops we sind a Water distilled from this Herb; we there also  
sind a SynIp, a Conserve, an Extract, and a Salt of it. The  
distill'd Water is serviceable to Women in Child-bed; expels  
the Foetus, whether dead or alive ; brings away the Aster-birth,  
promotes the monthly Evacuations when stopt, purges the Kid-  
neys and Urinary Passages, promotes Urine, and expcis the  
Stone; cures the Jaundice, and is good against the Dropsy.  
The Syrup and Conserve are used sor all Weakness, Coldness,  
Impurities, and Pains in the Matrix ; they also promote the  
Menses, and facilitate. Child-birth. The extract dissolves  
Stones, and carries off Suppressions of Urine, *Andr. Zeigler,  
Pharm. Spag. p.%7.* The Conserve in also good to purify and  
fortify the Matrix : It is likewise good against the Chlorosis.  
*Zacutus Lusitanus, Lib.* 2. *Obs.* 99. *Prax. Adm.* cured a Chlo-  
rosis os ten Years standing with it. Its Salt is, among other  
things, an excellent Antidote against the Plague. *Ambrose  
Paraus, L.* 2I. *Chir. Co* 25. *Conrad. Khunrah. Medull.  
Destill, p.* 2. Co 7. *Job. de Cuba, in Hint. San.* makes men-  
tion of *Artemisia,* and says, that if any one has this Herb in his  
House, the Devil can do him no Harm. If any one place a  
Piece of this Herb above the Door of a House, nothing unlucky  
can besal that House. See also *Dioscor. L.* 3. *C. s.y.y. Job.  
IVier. de Prase. Damon. L. 5.* 22. *Artemisia* hung up in the  
Entry of a House banishes all Witches, *P. Bayr, L.* I6. *Cr.*Co 3. *Fernelius* from *Pliny, N. Hi L.* 25. *C.* Io. informs  
us, that *Artemisia* held in the Hand banishes wild Beasts and  
Devils. The Down of Artemisia is the Moxa of the *Germans,  
Ephem. N. Co Dec.* 2. *An.* I. *Obs.* 6.

The sabulous Accounts above related concerning the Virtues  
of *Artemisia,* in banishing Deviis, Witches, and Spectres, I  
have quoted only with a View of shewing the great Veneration  
which People have had sor this Plant, amounting eVen to Super-  
stition.

*Mugwont* has a little herby, saltish Taste,‘and gives a saint  
red Colour to the blue Paper. The Salt which is naturally in  
this Plant, probably resembles Sal Ammoniac, bur is united  
with a great deal of Sulphur and Earth ; for by the Chymical.  
Analysis we obtain from *Mupewort,* beside several acid Liquors.

some concreted. Volatile, and Very lixivial fixed Salt, and a  
great deal of Sulphur and Eartin All these Principles render  
this Plant very aperitive, and proper to regulate and restore the  
Menses. *Martyn's Toumofort.*

*Dioscorides* tales Notice of another ARTEMISIA, which **he**calls λεπτόφυλλος, which is, .I suppose, the *Artemisia tenui-  
folia,* or *Abrotonum Campestres* See ABROTANUM.

There is another Species of Artemisia which grows in *China,*from winch the *Moxa* celebrated by Sin *William Temple* is pro-  
cur'd, by taking out the gross Fibres of the dry'd Leaves, and  
rubbing these Leaves with the Hands, till the green Part crum-  
bles away, and the lanugineus Fibres alone remain. *Dale* calls  
this Plant *Artemisia. . \* . :*

*Artemisia Chinensis, cujus mollugo* Moxa *dicitur,* Pluk.  
Phytog. Tab. I 5. Almag. 5o. Hist. Oxon. 3. 5. *Artemisia  
orientalis vulgarisfacie.* Act- Philosoph. Lond. N° 276. p. I020.  
*Musia pattree,* Malab. *Moxa,* Kempf. Ed. AngL App. 27.  
Ainanit. Exot. 584. 6οο, *An Ytzecuinpatli,* Hern. MUG-  
WORT OF CHINA. ’ .

ARTEMISION. The Name of a Month among the *Mace.'  
donians,* in the Beginning of which happen'd the Vernal Equi-

. noX, *Gal. Com.* I. *in Lib. I. Epid.-*

ARTEMIUS DIANIO. The inventor of a Dentifrice  
against the *Stridor Daentium,* which consisted of equal Quanti-  
ties of white Bread, old and dry enough to grate; Salt, Pepper,  
Indian-leaf, Costus, and Hartshom, reduced to a Very fine ι  
Powder. *Marcellas Empiricus, Cap.* 13.

ARTEMONIUM, ἀρτεμώνιον. The Name of a Collyrium,  
described by *Galen, Lib.* 4. *de Co M. S. L. Cap.* 7.

ARTENNA. The Name os an aquatic web-footed Bird,  
Called also *Diomedea,* because sound in the *Diomedean* Illes,  
now called *Tremiii. Castellus. -.*

ARTERIA, ὰρτηρία, an Artery. ... ;

Ἀρτηρίη, *Anteria,* in *Hippocrates,* generally signifies what we  
**call** the *As.pera Artcria,* that is, theTube which conveys **the**Ain to the Lungs. However, though this Author was utterly  
Ignorant of the true Sources and Uses of the Arteries, which he  
confounds with the Veins, it may he of some Importance to the  
perfect Understanding of his Works, to specify his Notions of  
the Blood-veffeis. ‘ .

*Hippocrates,* in one Passage, *[Lib. de Alimento’]* acknowledges.  
*That the Feint proceed from the Livcr, which is the Origin ana  
Foot of them, as the Heart is ofthe Arteries* .. And elsewhere he  
maintains, that the Veins and Arteries proceed equally from the,  
Heart *[Lib. de Carnibus]. t- " There are, fays he, two hollow  
" Viins which proceed from the Heart, one of which is callsd  
" the Artery, and the other the Hollow Fein.”* in the Days of  
*Hippocrates* the Name of VEIN was indifferently apply'd to all-  
Blood-veffels; and the Word Artery [Ἀρτηρίιί, ἀπο τοῦ τὸν ιάερα  
τηρεῖν, because if contains Air] - properly denoted the *Afpcra*

*' Arteria,* or *Pipe of the; Lungs. \_ Hippocrates* also gives the.  
Name of Veins to the *Ureters, and* eVen to the Nerves. Be-  
tides these, there are few Passages in which he makes a formal  
Distinction betwixt *Arteries* and *Viins;* which Circumstance  
may render the Books, or at least the particular Passages of them,.  
in which this Distinction is made, suspected. *" The Artery,  
" adds he immediately after, includes more Heat than'the hollow'.  
" Vein, and is the Reservoir of the Spirit (rciUsiVei* τὸ πτεῦμαJ.  
*" There are as yet other Viins id she Body besides these tuso.^ As  
♦c to that which has the largest Cavity, and. is fixed* to *the  
" Heart, it runs through all the 'Belly ana Diaphragm, and  
sends a Branch to each Kidney, and at the Loins it .divides,  
and fends Branches to other Parts, and to both Legs. Above  
the Heart also this Viin divided iisedsi to the Eight and the  
ci Left, and; mounting 'to the Head, distributes itself to each  
" Temple.\ To this may be joined other Viins, which are also  
" very large; but, in one Word, all the several Viins which are*

*- " dispersed over the whole Body,proceed from the Hollow stein.*

*" and the Artcry.\* . ... ... -- -*

Here are already two Opinions concerning the Origin of the.  
Veins and Arteries; and there is still a third sound in three  
other- Passages os the Works os the same *Hippocrates,* both wish  
regard to the Origin and the Distribution Of the Veins *[Lib. de  
Osseum.Natura, Lib. de Natura Humana, et Dibscde Locis in  
Homirus. " ‘ The largest Veins: of the human Body, suysihe, are  
" disposed in this manners: Thcre are four Pairs of them in also  
“ The first Pair rise from behind the Head, and, descending by  
" the exterior Part os. the Nape of the Neclt an each Side the  
“ Spine, reach the-Hip ana Thighs; and, passing thence through  
" the. Legs, they reach the externalstnclcybones and Feet. For  
“ this Reason, in Pains of the stack or Hip, Bleeding in the*

*- " Ham, and in the external Ancle, affords great Relief. T.he  
" second Pair, coming also from the Head, descend from the Ears  
" along the Neck ; they, are called the Jugular Feins, ana fol-  
low the Spine in its inner Part, till, arriving at the. Loins,  
" they branch out on both hands to the Testicles, , the Thighs, and  
" the Insides of the Hams, and past thence through the interna s  
" Ancles to the inner Sides of the Feet t For this Reason, in*

*Pains of the Testicles andLoirts, Bleeding in the internal Viins  
" of the Ham and Ancle is ver.i uiefuL The third Pair rife*

*Ci from the Temples, and, passing from the Neck ionuards the  
" Shoulders, reach the Lungs; and frcrn thence passing on one  
c( Side from the Right to the Left, run along under the Breasts  
Ci to join the Spleen arid Kidneys ; and on the other Side passing  
" from the Les.t to the Right, run also by the Breasts to the Lsu  
" ver and Kidneys ; and at last they terminate in the strait In-  
“ tesiine. The fourth Pair, risingfrom the Forehead and Eyes,  
tc past below the Lungs and Clavicles, and thence by the fapcrior  
" Part of the Anm, reach the Elbow, the Hands, and Fingers ;  
" and they return again from the Fingers hy the Palm of the  
ii Hand, by the Elbow, and by the under Side of the Arm, in  
" order to reach the Armpits ; and by the superior Part of the  
" Ribs on one Side to the Spleen, and on the other to the Ltvcri  
de These two Branches, pasting beyond the Belly, terminate at last  
" at the private PartsP '*

As a *Salvo* for the Contradiction betwixt this Passage and  
the preceding, it may be alleged; that the Book *De Offium  
Natura,* was not written by *Hippocrates,* but by *Polybius,* his  
Son-in-law. Neither *Galen* nor *Erotian,* have made any  
Mention of it among the Boohs written by *Hippocrates*; at  
least, they have not spoken os its Title, though they seem to  
have explained some Words that occur in the same Books  
There is also a Passage of *Aristotle, [De Gencrap. Animal. Lib..*3. *Cap.* 3.] in which that Philosopher, talking of the *Origins  
and Distribution of the Viins,* and relating the Sentiments of  
several Physicians with regard to that Point, cites the very  
Words os the Book *De Natura Ossium,* which we have trans-  
lated, and cites them aS being written by *Polybius.* This Proof,  
though apparently sufficient, does not remove .the Whole of the  
Difficulty, because the same Words are sound in the Book *De  
Natura Humana,* which *Galen* strongly .maintains to be written  
by *Hippocrates,* pretending to prove it by the Authority of  
*Plato,* who, as he says, has quoted some Passages of it, as belong-  
ing to *Hippocrates,* though others have ascribed, that Book to  
*Democritus.'* The same *Galen [De Hippocratis id Platonis De-  
cretis, Lib. 6.Cap.* 3.] nevertheless denies, that this last Opi-  
nion, touching the Origin and Division of the Veins, wad em-‘  
braced either by *Hippocrates os Polybius*; and.allures ns, that it  
has been foisted into the Text, which, by the way, is not very  
probable, since we find the same Opinion in the Book *De LOciS.  
in Homine.*  τ

There is another Difficulty with regard'to the'Book Do'  
*Carnibus,* whence I have taken what I said aheut the Veins  
and Arteries proceeding from the Heart, *l ' Aristotle,* in the Pai-  
sage just cited, after having observed, *that almost all Physicians  
agreed with* Polybius to *make the. Veins .proceedfrom the Head,.*concludes, *that they wore, all in Abe rvrong, not knowing that ie\  
was from the Heart, and not from the Head they rise, id .Hip-  
pocrates* is the Author of the Book *De.Carnibus,* where this  
Sentiment of *Aristotle,* in .clearly establish’d,, whet Appearance is:  
there, that this Philosopher should have been ignorant of it *T.*And why might he .not have read the Writings of *Hippocra-  
tes,* as well aS those of *Polybius S* One might infer from this,  
that no more belongs to *Hippocrates,* than that *De Natura Oso  
sium.* But it may be, *Aristotle,* has in that Passage quoted *Po-  
lybius,* or even *Syennesis of Cyprus,* or *Diogenes* os *Apollonia,.*Physicians of small Reputation, in Comparison os *Hippocrates,*rather than; *Hippocrates* himself, who is only mentioned in one.  
Passage of all hisJWorks *[^Politicor. Lib.* 7. *Cap.* 4.].' -It may  
he, Isay, he has omitted quoting him, out of a Principle of;  
Envy, or Ill-will; tho' he seems to .speak advantageously of  
him in the Passage refers'd to. *Plato* has: behav'd better, with  
regard to this antient Physician, having,, in several Passages,  
made very honourable Mention os him. It is also possible, that  
the Book we are talking os may not have been written thy *Hip-  
pocrates',* the Tide os it, at least, is not to be sound in the List:  
which *Erotian* has given Os his Works. *Le Clerc. .*

r The Arteries are conical Channels, which convey the Blood-  
from the Heart ho. alsthe Parts of the .Body.

Each Artery is composed of three Coats, of which the first;  
seems to he a Web of fine Blood-vessels and Nerves, for the  
, nourishing of she;Coats of the Artery. The second is -made’  
up of circular, or rather spiral. Fibres, of which there are.  
snore or fewer Strata, according to the Bigness of the :Artery.:  
These Fibres have a strong Elasticity, thy which they contract;  
themselves with some Force,, when; the Power, .by wdiich -they'  
have been stretched out, ceases. The ffard and inmost Coat is -  
4fine, dense, transparent Membrane,.whichcheeps,the Blood,  
within its Channels, which otherwise, upon the Dilatationedf.  
the Artery, -would eashy separate the spiral Fibres from one an-  
other.. Ἄδ the Arteriey.^row smaller and smaller, so thtise  
Coats grow thinner and thinner, and. the Coats of rhe Veins  
seem to heonsya Continuation of the;Coats of the capillary  
Arteries. Ἄ : z Ί\* : εἴ ΛΛ. ς

The Structure of the Arteries being, thus premised, it will he  
easy-to account-for their Pinse. When the Left Ventricle ofthe  
HeartxonttactS, and throws its Blood' into the great.-.Artery,-'  
the Blood in the Artery is not only thrust forwards towards the;Extremities, but the ChannelOf the. Artery is likewise dilated ;  
because Fluids, when they are pressed, press again to all hands.

and their Pressure is always perpendicular to the Sides of the  
containing Vessels ; but the Coats os the Artery', by any small -  
Impetus, may be distended ; therefore, upon the Contraction  
os the Heart, the Blood from the Lest Ventricle will not only  
press the Blood in the Artery forwards, but both together will  
distend the Sides of the Artery. When the impetus of the  
Blood against the Sides os the Artery ceases, that is, when  
the Left Ventricle ceases to contract, then the spiral Fibres of  
the Artery, by their natural Elasticity, return again to their  
former State, and contract the Channel of the Artery till it is  
again dilated by the Systole of the Heart. This Diastole osthe  
Artery is its Pulse, and the Time the spiral Fibres are return-  
ing to their natural State, is the Distance between two Pulses.  
This Pulse is in all the Arteries of the Body at the same time ;  
for whilst the Blood is thnist out of the Heart into the Artefy,  
the Artery being full, the Blood must move in all the Arte-  
ries at the same time ; . and because the Arteries are conical;  
and the Blood moves from the Basis of the Cone to the Apex,  
therefore the Blood must strike against the Sides of the Vessels,  
and consequently every Point of the Artery must he dilated at  
the same time that the Blood is thrown out of the Lest Ven-  
tride os the Heart ; and as soon aS the Elassicity of the spiral  
Fibres can overcome the Impetus of the Bloed, the Arteries  
are again contracted. Thus there are two Causes, which ope-  
rating alternately, keep the Blood in a continual Motion, *vizc*the Heart and Fibres of the Arteries : But because the one is  
stronger than the other, therefore, though the Blood runs con-  
tinuaUy, yet, when the Artery is open'd, it is seen to move  
*pcr faltum. Keills Anatomy. ‘*

*Distribution of the* **ARTERIES,** *according to* **WINSLow.**

The Heart throws the Bloed into two groat *Arteries* ; one  
of which is named *Aorta, office Arteria Pulmonalis.*

The *Aorta* distributes the Bloed to all the Parts os the Body,  
for the Nourishment of the Parts, and sor the Secretion of dis-  
serent Fluids.

The *Artcria Pulmonalis* Carries the venous Blood thro' all the  
capillary Veffeis of the Lungs.

Both these great or general *Arteries* are subdivided into seve-  
ral Branches, and into a great Numher os Ramifications. For  
an Account of the Pulmonary *Artery,* see **PULMONES.**

*Of the* **AO RT A.**

The Basis of the Heart being very much inclined to the Right  
Side, and turned a littie backward, the *Aorta, Tab.sp. Fig.* I.  
goes out from it in a direct Course, nearly oyer-against the  
fourth Vertebra of the Bach. Its Course is direct, with respect  
to the Heart; but, with respect to all the rest of the Body, it  
ascends obliquely from the Left to the Right-hand, and from  
hesore, backward.

Soon after this, Jt hends obliquely from the Right-hand to  
the Left, and from before, backward,-reaching as high as the  
second Vertebra of the Back ; from whence it runs down  
again, in the same Direction, forming an oblique Arch. The.  
Middle of this Arch is almost opposite to the Right Side or Edge  
Os the superior Portion of the Sternum, hetween the cartilagi-  
nous Extremities or sternal Articulations Of the first two Ribs. ’

From thence the *Aorta* descends in a direct Course along the  
anterior Part of the Vertebrae, all the way to the OS Sacrum,,  
lying a littie towards the Left-hand, and there it terminates in;  
two subordinate or Collateral Trunks, call'd *Artcria Iliaca,  
Tab. S. Fig. 53-* 53-

The *Aorta* is by Anatomists generally divided into the *Aorta  
Ascendens,* and the *Aorta Descendens,* tho' both are but one  
and the same Trunk. It is termed *Ascendens,* from where it  
leaves the Heart, to the Extremity of the great Curvature or

- Arch. .The remaining Part Of this Trunk, from the Arch to  
the Os Sacrum or .Bifurcation, at 28. *Tab. 5.* is named *De-  
scendens'. '.si.. ' ...*

The *Aorta descendens* is farther divided into the superior and  
inferior Portions ; the first taking in all that dies above the Di-'  
’» aphragm ; the other, all that lies hetween the Diaphragm and

the Bifurcation. i . . . *... ..u*. The *Aorta ascendent* is principally distributed to Part of the

Thorax, to the Head and upper Extremities. Tie superior  
Portion os the *Aorta descendens* furnishes the rest os the Thorax;  
the inferior Portion furnishes, the Abdomen-and lower Ex-;  
tremities. . . .

. The great Trunk os the *Aorta* thro\* its whole Length sends1off immediately several Branches, winch are afterwards differ-  
ently rami sped ; and these Arterial Branches may be look'd upon  
aS so many Trunks, with respect :to the other Ramifications,  
which again may he consider'd as small Trunks, with regard to’  
the Ramifications that they fend .off. ......

The Branches winch go our immediately from the Tnmk of  
the *Aorta,* may he term'd Original or Capital Branches ; and  
os these, some are l^rge, anfl others Very small, .

The large capital Branches of the *Aorta* are these : Twfe  
***Accent\*Sabdasulaej rwy Carotidessw CoeliacaontMoferflo***

*tcrica Superior;* two *Portales,* formerly termed *Emulgentes;*one *Mesenterica Iniferior* ; and two *Iliaca.*

- The small capital Branches are chiefly the *Artcrice Coronaria  
Cordis, Bronchiales, Oefophagoea, Intercostales, Diaphragma-  
ticae Inferiores, Spermaticae, Lumbares,* and *Sacrce. -*. These capital Branches or *Arteries* are for the most part dis-  
posed in Pairs ; there heing none in odd Numbers but the *Coe-  
liaca,* the two Mesentericae, some of the GEsophagaeae, the  
Bronchialis, and sometimes the Sacrae.

The Ramifications of each capital Branch are in uneven  
Numhers, with respect to their particular Trunks ; but with  
respect to-the Ramifications of the like capital Trunks on the  
other Side, they are disposed in Pairs. Among the Branches  
there are in odd Numbers none but the *Artcria Sacra,* when it  
is fingle, and the CEsophagaeae, the Ramifications of winch  
are, however, sometimes found in Pairs.

Before I enter upon tile Detail of each of these particular  
*Arteries,* many of winch have proper Names, it will be con..  
Vernent to give a short View of the Disposition and Distribution  
of the principal Arterial Branches, as a general Plan, to .which  
all the Particularities of each Distribution may afterwards be re-  
ferred ; for I heve found hy Experience, that the common  
Method os describing the Course of all the Ramifications of  
these Vessels, without having first given a general Idea of the  
principal Branches, is Very troublesome to Beginners.

The *Aorta* gives Rise to two small *Artcries,* called *"Coronaria  
Cordis,* which go to the Heart and its .Auricles ; one os which  
is situated anteriorly, the other posteriousty, and sometimes they  
are three in Number. See *Tab. sq. Fig.* 2. 2.

. From the upper Part of the Arch or Curvature, the Aorta  
sends out commonly three, sometimes four, large capital  
Branches, their Origins heing very near each other. When  
there are sour, the .two Middle Branches are' termed *Arteria  
Carotides, Tab. 5. Pig.* 5. 5. the other two *Subclaviat, Tab. esc  
Fig.* 4. An and both are distinguish'd into Right and Left.

When there are but tbree Branches, which is ostenest the  
Case, the first is a short Trunk, common to the. Right Sub-  
clavian and Carotid ; the second is the Lest Subclavian, and the  
third the left Carotid. Sometimes, tho' Very rarely, these four  
*Artcries* unite in two Trunks.

The Origin os the Left Subclavian, terminates the *Aorta.  
Ascendens*; hut I have sometimes observed sour Branches, the first  
three of which were those already mentioned, and the fourth a  
distinct Trunk osthe Left *vertebral Artcry. si*

It must he observed, that these large Branches, which arise.  
from the Curvature of the *Aorta,* are situated obliquely ; the  
first, or that which is most on the Right-hand, lying more for-  
ward than the rest ; and the last, winch is most oh the Left-  
hand, more backward. The first and second, or middle Branches,  
are generally in the middle of the Arch, and the third lower  
down. Sometimes the first alone is in the middle ; all which  
Varieties depend on the Obliquity os the Arch.

. The *Carotid Arteries* run up directly to the Head, each of  
them heing first divided into two, one external, the other in-  
ternal. The external *Artery, Tab: ζ. Fig.* 9, Io, II, 12.  
goes cluefly to the outer Parts of the Head, and Dura Mater,,  
or first Covering of the Brain, to which it passes thro\* a Fora-  
men Of the Cranium at B, B, and others. The internal en-

. ters the Cranium thro' the bony Canal of the Os Petrosum; and.  
is distributed thro' the Brain by a great Number *os* Rarnifiea-  
tions. *Tab.* 5. *Fig.* i8. I8. ’ : - χ

The Subclavian *Artcries* separate laterally, and almost trans-,  
yerfly, each toward that Side on winch it lies, hehind and un-  
der the Claviculae,, from whence they have their Name. The  
Left seems to he shorter, and runs more obliquely, then the,  
RIght. . ,  
The Subclavian on each Side terminates at the upper Edge  
of the first Rib, hetween the-lower Insertions of the first Scar.  
senna Muscle ; and there, as it goes out os the Thorax, takes  
the *Nntnc. Cs Artcria Axillaris. A - .*

During, this Course of the Subclavian Artery, taking in the  
eomrnon Trunk os the Right Subclavian, several *Arteries* arise  
from it, *viz.* the *Mammaria Interna, Mediastina, Pericardiac  
Diaphragmatica minorsseve s.aperior. Thymica, nsosi.T.rachealis.*

The *Thymica* and *Trachealis* on each Side are in some Sub-'  
jects only Branches of one small Trunk, which, springs from the,  
common Trunk os the Right *Subclavian* and *Carotid, 'si ,*

They are generally smallssrfrrtio, which run sometimes sepa-.  
sate, and sometimes partly separate, and partly joined.,. .

The *Subclavian* sends off likewise the *Viriebrales, Cervicales^*and sometimes several os the upper *Intcrcostales.'*

The *Axillary Artiry,* which is only a Continuation of the  
*Subclavian,* from where it goes out os the Thorax th the  
Axilla, detaches chieby the *Mammaria externa,* or *Thoracica*superior. *Thoracica* inferior, *Scapulares externa, Scapularis in~  
terna ; Humeralis,* or *Muscularis,* &c. Afterwards it is con-,  
tinned by different Ramifications, and under different Names,.  
Over the whole .Arm, all the Way to the Ends of the Fingers...

The superior Portion of the *Aorta descendens* gives off the.  
***Arterial Branchialis,*** which arise sometimes by a small-common

Trunk, sometimes separate, and sometimes do not come imme-  
diately from the *Aorta.* It next sends off the *Oes.ophagaa,*winch may he looked upon as *Medeastina Posteriores* ; and  
then the *intercostales* from its posterior Part, which in some  
Subjects come all from this Portion of *ffiCAorta* ; in others only  
the lowest eight or nine.

The small anterior *Artcries* here mentioned are generally, at  
their Origins, single, and in uneven Numbers ; but they di-  
. vide soon aster toward the Right and Lest. . -

The inferior Portion os the descending *Aorta,* as it passes  
thro’ the Diaphragm, gives off the *Diaphragmatica inferiores,*or *Phrenicae* ; which, however, do not always come imme-  
diately from the *Aorta t* Afterwards it sends off several Branches  
anteriorly, posteriorly, and laterally. . .

The anterior Branches are the *Coeliaca,* which supplies the.  
Stomach, Liver, Spleen, Pancreas, *etc.* the *Mesenterica su-  
perior,* . which goes chiefly to the Mesentery, to the small In-  
teshnes, and to that Part of the great Intestines, which lies on  
the Right Side of "the Abdomen; *tsuo Mesenterica inferior,*which goes to the great Intestines on the Left Side, and pro-  
duces the *Hatrnorrhoidalis interna* ; and, lastly, the Right and  
Left *Artcrice Spermatica,* or Spermatic Arteries.

. The posterior Branches are the *Arteria Lumbares,* of which  
there are several Pairs, and the *Sacra,* which do not always  
come from the Trunk of the *Aorta.*

.. The lateral Branches are the *Capsulares* and *Adiposa,* the  
Origin of which often varies ; the *Renales,* formerly termed  
*Emulgentes* ; and the *Iliaca,* winch terminate the *Aorta* by the  
Bifurcation already mentioned. '

*. fs.hp.IHac Artery* on each Side is commonly divided into the  
external or anterior, and internal or posterior.

. The *internal Iliaca* is likewise named *Arteria Hypogastrica ;*and its Ramifications are distributed to the Viscera contained in  
the .Pelvis, and to the neigbouring Parts, both internal and ex-  
iernah ‘ ;

- The *Iliaca externa,* which is the true Continuation of the  
Iliac Trunk, and alone deserves that Name, goes on to the In-  
guen, and then out os the Abdomen under the Ligamentum  
Fallopii, having first detached .the *Epigastrica,* which goes to  
the Musculi Abdominis Recti : Having quitted the Abdomen,  
it commences *Arteria Cruralis,* which runs down upon the  
Thigh, and is distributed by many Branches and Ramifications  
**to** all the lower Extremity.

. Ishallnow go on to examine particularly all the capital Or  
original Branches os the *Aorta,* from their Origin to the Entry  
os them, and of their Ramifications, into all the Parts of the  
Body, and all the different Viscera and Organs. ,

***The* CARDIAC or CORONARY. ARTERIES of the HEART-**

. The *Cardiac* or *Coronary Antcries asfoae* Heart, *Tab.* 5. *Fig.  
y.* 2. arise from the *Accra* immediatelyon its leaving the Heart.  
They are two in Number, and, according to the natural Situ-  
ation of the Heart, one is rather superior than anterior ; the  
other rather inferior than posterior.

. They go out near the two Sides, of the puimonary *Arteries,*winch having first surrounded, they afterward run upon the  
Basis of the Hears, in form of a kind of Crown or Garland,  
from whence they are called *Coronaries,* and then' pursue the  
superficial Traces of the Union of the two Ventricles, from  
**the** Basis of the Heart to the Apex. .

. ..i They Tend communicating Branches to each other, which  
are afterward lost in the Substance of the Heart. - -

We sometimes meet , with a third *Coronary Artcry,* which  
arises from the *Aorta* more backward, and is spent on the poste-  
rior orlower Side of the Heart. --in/:.

*The* **CAROTID ’ARTERIES.**

The *Carotid Art cries, T.ab. q. Fig.* 5. 5. - are commonly de-  
Inonstrated after the Subclavian ; but I choose to describe them  
first, thet I may afterwards be able to pursue the *Antcries* of  
the Thorax’arisingPartly from the *Subclavia,*, and partly from  
the *Aortis descendens,* without interruption.

Τ These *Arteries* are two in Number, one called .the Right  
*Carotid,* the other the Left. They arise near each other, from  
**the** Curvature or Arch Of the *Aorta* ; the Lein immediately,  
the Right most commonly from the Trunk os the *Subclavia*On the same Side, as has heen already observed. - .

They run upon each Side of the *Trachea Arlrtia,* between  
it and the internal Jugular Vein, as high as the Larynx, .with-  
out any Ramification. During this Course, therefore, they  
may be named *Carotid* Trunks, or general, common, and  
original *Carotids. .* Each of these Trunks is afterwards ramified  
in the following manner.

The Trunk, having reached as high as the Larynx, is divided  
Into two large Branches, or particular *Carotids,* one named *eAn  
tcrnal,* the other *internal,* hecause the first goes chiefly to the  
' external Parts of the Head j-the second enters the Cranium, and  
IS distributed to the Brain. . ’ . ; . \* /εἴ

The external *Carotid* iS anterior, the internal posterior; and  
the external is even situated more inward, and Rearer the La-

ryrix, than the Other; but the common Names may still bn re-  
tinned, as being taken not from their Situation, but from their  
Distribution.

*The* **EXTERNAL CAROTID ARTERIES.**

. The external *Carotid* is the smallest, and yer appears bv its  
Direction to he a Continuation of the common Tnmk. It  
runs insensibly outward, between the external Angle os the  
lower Jaw, and the parotid Gland, which it supplies as it passes.  
Afterwards it ascends on the Foreside of the Ear, and enut in  
the Temples.

In this Course it sends off several Branches, which may  
well enough-he divided into anterior or internal, and posterior  
or external ; - and the principal Branches Of each kind are  
these.

The first anterior Or internal Branch goes out from the very  
Origin of the *Carotid* on the Inside ; and having presently af-  
terwards taken a littie Turn, and sentoff Branches to the Ju-  
gular Glands near it,-to the Fat and Skin, it runs transVerfly,  
and is distributed to the Glandulae Thyroidaeae, and to the  
Muscles and other Parts of the Larynx ; fur which Reason I  
name it *Laryngceee* or *Gutturalis superior.* It likewise sends  
some Branches to the Pharynx and Muscles of the Os Hy-  
oides. .

The second anterior Branch pastes over the nearest Cornu  
of the OS Hyoides to the Muscles os that Bone, and of the  
Tongue, and to the Glandulae Sublinguales ; afterwards passing  
before the Cornu of the Os Hyoides, it loses itself in the  
Tongue, from whence it has been called *Artocia Sublingua-  
lis -,* and it is the same *Artery* which- others have named  
*Ranina.*

The third Branch, or *Arteria maxillaris inferior, goes to*the Maxillary Gland, to the Styloide and Mastoide Muscles, to  
the Parotid and Sublingual Glands, to the Muscles of the Pha-  
rynx, and to the small Flexors of the Head,

The fourth Branch, which I name *Artocia maxillaris externa,*passes anteriorly on the Masseter Muscle, and middle of the  
lower Jaw near the Chin : Afterwards it runs under the Mus-  
culus Triangularis Labiorum, which it supplies as-well as **the**Buccinator, and the Quadratus Menti.

. It sends off a particular Branch, Very much contorted, which  
divides at the angular Commissure Of the Lips, and, running in  
the same manner along the superior and inferior Portions of  
the Musculus Orbicularis, it communicates on both Sides with  
its Fellow, and thereby forms a kind Of *Artocia Coronaria La.,  
biorum. ... si*. Afterwards it ascends towards the Nares, and is distributed to  
the Muscles, Cartilages, and other Parts of the Nose, sending  
down some Twigs, which communicate with the *Coronary Artcry*os the Lips. Lastly, it reaches the great Angle of the Eye,  
and is ramify'd and lost on the Musculus Orbicularis Palpebra-  
rum, Superciliaris, and Frontalis. Thro’ all this Course,-it is  
named *Arteria Angularis.*

- The fifth Branch arises over-against the Condyle Of the lower  
Jaw, and, as it is Very considerable, I call it *Maxillaris Interna.*It passes behind the Condyle, and, having given off a Twig  
among the Musculi Pterygoidaei, it is divided into three princi-  
pal Branches.: 3

. The first Branch goes thro' the inferior Orbitary, orSpheno-  
thaxillary Fissure, to the Orbit, after having suppsy'd theMus-  
euli Peristaphylini, and the glandulous Membrane os the poste-  
rior Nares, thro' the Foramen Spheno-palatinum. X name this  
Branch *Spheno-maxillario. ... ... -- " ~ .*

; It is distributed inferiorly and laterally to the Parts contain'd  
in the Orbit, and detaches a small subaltern Branch through  
the Extremity *os* the superior Orbitary or Sphenoidal Fissure,  
which enters the Cranium, and is spent upon the Dura Ma-  
ter, communicating there with the other *Artery* .of the Dura  
Mater, which enters by the Foramen Spinale Os the Sphenoidal  
Bone. . . .. ..:- ,:r -,

It sends off likewise another subaltern Branch, which pastes  
thro' the posterior Opening of the Orbitary Canal, and, having  
furnished the Maxillary Sinus, and the Teeth, goes out by **the**inferior Orbitary Hole, and on the Cheek communicates with  
the *Angular Artery. ‘ ss.*

The second of the three Branches runs thro' the Canalof **the**lower Jaw, and, heing distributed so the Alveoli and Teeth,  
goes out at the Hole near the Chin, arid loses itself in the  
neighbouring Muscles, communicating with the Rami os **the***.Artesia Maxillares externa.*

.. The third Branch of *the Maxillaris interna* runs np between  
the internal and external *Carotide,* pastes thro' the Foramen Spry  
nale of .the Sphenoidal Bone, and .is distributed to the Dura  
Mater by several Ramifications,'which run forward, upward,  
and backward; the uppermost communicating with those on  
the other Side, above the longitudinal Sinus Os the Dura  
Mates, . \*

This *Artery* os the Dura Mater, which may he termed  
*Spheno-s.pinalis,* to distinguish it from those that go to the same  
Part by another Course, arises sometimes from the Trunk of

**the** external ***Carotid,*** hehind the Origin of the Laryngaea or  
Gutturalis superior, and sometimes from the first Branch of  
***she Maxillaris intcrna,*** just before it enters theSpheno-maxillary  
Fissure.

The sixth anterior or internal Branch, which is Very small,  
is spent on the Musculus Masseter.

The first external or posterior Branch is named ***Arteria Occi-  
pitalis, Tab.*** 5. ***Fig.*** II. II. It passes obliquely before the  
internal Jugular Vein; and, having given Twigs to the Musculus  
Stylo-hyoidaeus, Stylo-gloilns, and Digastricus; it runs between  
the Styloide' and'Mastoid***e*** Apophyses, along the Mastoide  
Groove,, and goes to the Muscles and integuments which cover  
the Os Occipitis, turning several times, in an undulating man-  
ner, aS it ascends backward.

" It communicates, by a descending Branch, with the Vertebral  
and Cervical ***Arteries,*** as has been already said, near the Top of  
the Head: It communicates likewise with the posterior Branches  
**os** the ***Temporal Artcry y*** and it sends a Branch to the Foramen  
Mastoidaeum. ....

The second external Branch spreads itself on the outward  
Ear, by a great many small Twigs on each Side; several of  
which run inward, and furnish the Cartilages, Meatus Audi-  
torius, Skin of the Tympanum, and internal Ear.

The Trunk of the ***external Carotid*** ascends afterward above  
the Zygoma, passing between the Angle of the lower Jaw and  
Parotid Gland, and forms the ***Temporal Artery,*** which divides  
into an anterior, middle, and posterior Branch.

The anterior Branch of the ***Temporal Artcry*** goes to the Mus-  
culus Frontalis, communicates with the ***Arteria Angularis,*** and  
sometimes gives off a Very small ***Artery,*** which pierces the in-  
ternal Apophysis of the Os Malte, all the way\* to the Orbit.  
The middle Branch goes partly to the Musculus Frontalis, part-  
ly to the Occipitalis; the posterior Branch goes to the Occiput,  
and communicates with the ***Arteria Occipitalis.*** All these  
Branches likewise furnish the Integuments. These Branches  
of the external Carotids are, in some measure, express’d ***Tab.*** 5.  
**Fig. 8,es, IO, II, 12.**

***..... The internal.* CAROTID ARTERY. ... ...**

The ***internal Carotid Artcry,*** leaving the general Trunk, is at  
first a littie incurvated, appearing as is either it were the only  
Branch os that Trunk, or a Branch of the Trunk of the ***extor-  
nas Carotid.*** Sometimes the Curvature is turn'd a littie out-  
ward, and then more or less inward,, passing behind the neigh-'  
bouring ***external Carotid, Tab. 5.*** I 3. I 3. - - . ’

It is situated a littie more backward than the ***Carotis externa,***and generally runs up, without any Ramification,, as high aS the  
lower Orifice of the great Canal os the Apophysis Petrosa of the  
Os Temporis.\* It enters this Orifice, directly from below, up-  
ward, find afterward makes an Angle according to the Direction  
of the Canal/ the rest of which it passes horizontally, heing  
cover'd by a Production of the Dura Mater. 1 4\*

At-the End of this Canal it is again incurvated from helow  
upward, and enters the Cranium through a Notch of the Sphe-  
noidal Bone.: Then it bends, from behind, forwards, and  
makes a third Angle on the Side of the Sella Sphenoidalis, or  
Turcica ; - and agin, a fourth finder the Clinoide Apophysis of  
that Sella. ***Sec Tola*** 5. ***Fig. iAn*** 14. . - - \* - -

As.it leaves the bony Canal to enter the Cranium, it sends  
**off** a Branch thro' the SphenoidalTiflure to the Orbit and Eye;  
and, soon afterward, another thro' the Foramen Opticum, by  
which it Communicates-with the external Carotid, ***Tab.*** e;  
**D, Dss - ' -** . Y-.. jo ... - ..... . **Λ**

Afterwards Ihe ***internal Carotid*** runs under-the Basis of the  
Brain to the Side of the Infundibulum, where in is at a small  
Distance from the internal ***Carotid of*** the other Side; and there  
It commonly divides into two principal Branches, one anterior,  
and one posteriori ss ? s . 6 .

i The anterior Branch-runs forward under the Brain, first  
separating from-that on the other-Side ; then- coming nearer  
again, itunites. with it by. an Anastomosis, or Communication  
in theν Interstice between the Olfactory-Nerves. Afterwards  
having-sent off some .small ***Arteries,*** which accompany these  
Nerves, Ft leaves-its Fellow, and divides into two or three  
Branches,.'— .-νύ-.-ν εἴ ...r ***..s ..... y ... - ... th***

.The first of these Branches goes to the anterior Lobe of the  
Brairr; rhe seconds which is-sometimes double/ «inverted on  
the-Corpus Callosum, to which it gives some Ramifications ;. as  
also to the Palx of. the Dura Mater, and middle- Lobe of **the**Brain. The-third, which, in some Subjects, is a distinct Branch,  
- in others, only a Division of the second, goes to the posterior  
Lobe os the Brain: - This might be look'd upon as a third prin-  
fcipal Branch, lying between the other two. ... - - -

st The posterior Branch communicates, first of all,'with the  
***Fort astral Artery*** of-the same Side. and then divides into several  
Branches, which run between the superficial Circumvolutions of  
the Brain, and are- ramified in many different Directions, on  
and hetween these Circumvolutions, all the way to the Bottom  
of the Sulci.-.- : - ' 6 . .-.XT '

***-'All*these Ramifications are cover'd by thcPia-Mater, in the**

Duplicature of which they are distributed, and form Capillary  
reticular Textures in great Numhers ; and afterwards they are  
lost in the inner Substance of the Brain. The anterior and  
middle Branches produce the same kind os Ramifications ; and  
the anterior, in particular, sends a Twig to the Corpus Callo-  
sum. The Ramifications os the internal ***Carotids*** are express'd  
betwixt the two Figures IS. I8. ***Tab. 5.***

***The SUBCLAVIAN ARTERY.***

***The Subclavian Art cries ( Tab.*** 5. 4. 4. τ are named from  
their Situation near the Claviculae, in the transverse Direction  
of which they run. They are two in Number, one Right,  
the other Lest ; and they arise from the Arch of the ***Aorta,*** on  
each Side of the Left ***Carotid,*** which commonly lies in the Mid-  
dle hetween them ; but.when both ***Carocids*** go out separately,  
they both he between the ***Subclavia.*** These ***Artcries*** terminate,  
hr rather change their Name,, above the Middle of the two first  
Ribs, between the anterior Insertions of the Musculi Scaleni.

The Right ***Subclavian*** is larger at the Beginning than the  
Left, when it produces the Right ***Carotid:*** Its Origin is like-  
wise more anterior and higher,, because of the Obliquity of the  
Arch of ***Aorta*** ; for which Reason also the Lest is shorter  
than the Right, and runs more .obliquely. Both of them are  
distributed much in the fame manner ; and therefore the De-‘  
scription of one may likewise be applied to the other.

The Right ***Subclavian,*** the longest of the two, gives off, first  
of all, small ***Arteries*** to the Mediastinum, ThymuS, Pericar-  
dium, ***Aspera Artesia, etc.*** which are named ***Mediastina, T.hy- '  
rnicce. Pericardia***, and ***Tracheales.***. These small ***Arteries*** some-  
times go out from the ***Subclavian*** itself, either separately, or by  
small common Trunks: Sometimes they are Branches of the  
***Mammaria intcrna,*** especially the ***Mediastina.***

Afterward this Right ***Subclavian,*** at about a Finger's Breadth  
from its Origin, osten produces the common ***Carotid*** of the  
same Side ; and, at a small Finger’s Breadth from the ***Carotid,***it gives off commonly three considerable Branches, quiz, the  
***Mammaria intcrna. Cervicalis,*** and ***Vertebralis***; and some-  
times an ***Intercostal Artcry,*** which goes to the first Ribs, and Is  
call'd Intercostalis superior.

***The* ARTERY *of the* THYMUs.: . . :**

The ***Arteria Thymica*** communicates with the ***Mammaria in-  
terna,*** and sometimes arises from the anterior middle Part os  
the common Trunk of the ***Subclavian*** and ***Carotid.*** The Thy-  
Irins receives likewise some Branches from the ***Mammana intcr-  
na,*** and ***Intcrcostalis superior.*** The same Observation may he ‘  
applied to the ***Mediastina*** and ***Pericardia.***

**TherARTERIES of the PERICARDIUM»**

The ***Pericardia*** arises much\* In the same manner with ***the  
Thymica;*** find runs down upon the Pericardium all the way **to**the Diaphragm, to winch it sends some small Ramifications- ."

***The* ARTERIES of tAe MEDIASTINUM. ‘**

The ***Mediastina*** arises sometimes immediately after the ***Thy\*  
mica,*** and ss distributed principally to the Mediastinum. - -

***The* TRACHEAL ARTERY. S ἐν : .**

The ***Trachealis,*** which may likewise .he named ***Gutturalis  
inferior,*** runs, up from the ***Subclavia,*** in a winding Course,  
along the ***Aspera Arteria,*** to. the Glandulae Thyroidaeie, and  
Larynx,-detaching small ***ArtcriesApp*** both Sides,, one of which  
runs to the upperPartof the Scapula.; \_ .. .. :

**ίΛ/βνππό MAMMARY'ARTERY. '**

The internal ***Mammary Artery*** .comes from the anterior, and  
lower Side of the ***Subclavia,*** near the Middle os the Clavicula ὁ  
and runs down,’for about One Finger’s. Breadth, behind the  
Cartilages of the; true Ribs, an - inch - distant from the Ster-  
num. - . . I ? ’ ' . ’ \* ”\* . i.

In its Passage it sends Branches to the Thymus, Mediastinum,  
Pericardium, Piedra, and- Intercostal Muscles. It likewise:  
detaches other Branches thro''these Muscles, and between **the**Cartilages of the Ribs, to the Pectoralis Major, and otherneigh-  
bouring muscular Portions, to the Mamma:, Membrana Ads-  
posa, and Skin. S' Ἀ : 1 .

Several of - these Branches eorninunicate by Anastomoses with  
the ***Mammaria externa,*** and other ***Arteries*** of the Thorax,  
especially in the Substance of the'Pectoralis Major,, and like-  
wise with the Intercostalet Afterwards it goes our os? the Tho-  
rax on one Side of the Appendix Ensiformis, and is dost **in the**Musculus Abdominis Rectus, a little below itssupperPart; corn.  
municating at this Place, by several small Ramifications, with  
***slums Arteria Epigastrica,*** and, in .its.Course, it gives Branches to  
the Peritonaeum, and to the anterior Parts of the oblique **and**transverse Muscles of the Abdomens : ***: t -***

***Ὕῥα CERVICAL ARTERY, -smetfr..:. )***

The ***Cervical Artcry*** arises from the upper Side:of the Subcla-  
vian, and is presently afterwards divided into two, which Come

out sometimes separately, sometimes by a small commonTrnnk;  
The largest of these two *Artcry.es is antcrior,* the other *posterior.  
Saea T.ab. ^. Fig.* **I9. - ' . - . ἵ**

The *antcrior Cervicalis,* running behind the *Carotid* os the  
same Side, is distributed to the Musculus Coraco-hyoidaeus,  
Mastoidaeus, Cutaneus, Stemo-hyoidaeuS, and Sterno- thyroidseus,  
to the Jugular Glands, the *Aspera Arteria,* the Muscles of the  
Pharynx, Bronchia, (Esophagus, and to the anterior Muscles  
which move the Neck and Head. This *Artery* has heen ob-  
served to send out the *Intercostalis superior.*

The *posterior Cervicalis* arises sometimes a little after the  
Vertebralis, and sometimes; from *ffiBt Artery,* st pastes under  
the tranverse Apophysis of the .last Vertebra os the Neck j and  
. sometimes -thro- a particular Hole in that Apophysis; and from7thence runs up backward, in a winding Course,. on the Verte- .  
bral Muscles of the Neckj and then returns in the same man-  
ner» . ς ' . . ἐν sc\ : ς sosu?

It communicates with a descending Branch of the *Occipital^  
Artery,* and with another of the *Pcrtebral Artery,* above the  
second Vertebra. It is distributed to the Musculi Scaleni, An-  
gularis Scapulae, and Trapezius, and to the jugular Glands )  
and integuments; . . .; .....; τ...’

*The* **VERTEBRAL ARTERY. t.**

The *Vertebral Artcry* goes tent from the posterior and upper.  
Side of the *Subclavian,* almost opposite to the *Mammaria inter- .,  
rla* and *Cervicalis.* It runs up thro' all the Holes in the trans-  
verse Apophyses of the Vertebrae os the Neck ; and in Its Pas-.'  
sage sends off little Twigs thro' the lateral Notches os these  
Vertebrae, to the Medulla Spinalis, and its Coverings, It also ;  
gives *Arteries* to the Vertebral Muscles, and to other Muscles  
near them. See *Tab. ζ. Fig.* 6. 6. ...

As it passes thro' the. transverse Hole os thesecondVertebra,  
it is generally incurvated, to accommodate Itself to .theparticu-  
Iar Obliquity of tins Foramen. And between this Hole and.  
that in the first Vertebra, it takes another larger Turn in aoon-  
trary Direction to the former: Having pass'd the transverse  
Hole of the first Vertebra, it is considerably incurvated a third,  
time, from before, backwards, as it goes thro' the superior and.  
posterior Notch in this Vertebra. See *Tab.* 5. *Fig.* I5.

At this third Curvature it sends off a small Branch, which is  
ramified on the outer and posterior Parts of the Occiput, and  
commun icates with the *Cervical and Occipital Artcries.* Having  
afterwards reach'd the great Foramen os the Os Occipitis, is,  
enters the Cranium, and pierces the Dura Mater; and on these  
Accounts It may be named *Arteria Occipitalis posterior,* to’  
distinguish it from the other, which is lateral. .

As soon as it enters the Cranium, it sends several small Rami-,  
fioations to the back Part of the Medulla Oblongata, and to  
the Corpora Olivaria, and Pyramidalia; which are likewise  
spread on the hack Sides of the fourth Ventricle of the Brain,,  
and form the Plexus Choroides os the Cerehellum. . . \_

Afterwards is advances on the Apophysis Baftlaris of the Cis  
Occipitis, inclining by small Degrees toward the *Vertebral Apla  
tery* of the other Side, all the Way to the Extremity of that  
Apophysis where, they both join in One common Trunk, which  
may be named *Arteria Basilares.*

*The* **ARTERIA BASILARIS. '**

*The Arteria Basilaris* runs forward under the great trans-  
verse Protuherance os the Medulla Oblongata, to winch it gives.  
Ramifications, as well as to the neighbouring. Parts of the Me-  
dulla. Sometimes this *Artery* divides again, near the Extre-  
mity of the Apophysis Basilaris, into two lateral Branches,  
which Communicate with the posterior Branches of the two  
*internal Carotides,* and are lost in the posterior Lobe of the  
Brain. ...

***The* SPINAL ARTERIES,**

The *Spinal Arteries* are two in Number, one anterior, and  
one *postcrior,* both produced by both the *Vertebrales*; each of  
which, as soon as it enters the Cranium, sends out a small  
Eranch, by the Union of which the *postcrior Spinalis* is form'd.  
Afterwards the *Pent ebrales* advancing on the Apophysis Basilaris,  
**or** Preduction of the Occipital Bone, detach backward two  
other small Branches, which likewise meet, and by their Union  
form the *Spinalis Antcrior.* These *Spinal Arteries* run down  
**on** the fore and back Sides of the Medulla Spinalis, and, by.  
small transverse Ramifications, Communicate with those which  
**the** *Intercostal* and *Lumbar Artcries* send to the same Part.

*The internal* **AUDIT o RY A RT** *E* **R Y.**

The *internal Auditory Artcry* goes, off from each Side of. the  
*Arteria Basilaris* to the Organ of Hearing, accompanying the  
Auditory Nerve ; having fust furnish'd several small Twigs to  
the Membrana Arachnoides, .

*Thepostocior***ARTERY,** *of the* **MENINX, or DURA MATER.\***The *posterior Meningaa* arises from the sameTmnk wist  
the *Auditoria Interna,* and goes to the back Part of the Dura

Mater, on the Occipital and Temporal Bones; and likewise  
supplies the neighbouring Lobes of the Brain.

*The superior* **INTERCOSTAL ARTERY.**

When the *superior Intercostal Artery* does nut go out from  
the Trunk of the *Aorta Descendens,* it commonly .arises from .  
the lower Side of the *Subclavian,* and runs down on the Inside  
of the two, three, or four uppermost true .Ribs, near their  
Heads -, and sends off, under each Rib, a Branch, which runs  
along the lower Edge, and supplies the Intercostal Muscles,  
and neighbouring Parts of the Pleura.... . ......

These Branches, or particular *Intercostal Arteries,* conimuni-  
cate with each other, at different Distances, by small Branches,  
which run upward and downward from one to the other, on the .  
Intercostal Muscles. - .... ... . ...

' They, likewise give Branches to .the Musculi Sterno-hyoidaei,  
Subclavius, Vertebrales, and Bedies os the Vertebrae; and also  
to the Pectoralis Major and Minor, piercing the Intercostal  
Muscles ; and lastly, they send Branches thro’ the Notches of  
the first four Vertebrae to the Medulla Spinalis, and its CoVer- .  
ings. .... .sese- .so i . . ss... :. . . ; .

- Sometimes the superior common *Intercostal Artery* comes  
from the *Cervicalis,* and not immediately from the *Subclavia..*Sometimes it arises from the *Aorta Dnsoendens,* either by small  
separate *Arteries,* or by a common Trunk, which divides as it  
runs obliquely up, upon the Rihs. Lastly, it sometimes arises  
froth the nearest *Bronchialis,* or from several *Bronchiales* toge-  
ther. si : si -

*The* **ARTERIAL DUCT** *corrvcrted into a* **LIGAMENT.**

The *Ductus Arteriosus,* which is sound only in the Foetus,  
and in very young Children, arises from the *Aorta Descendens,-*immediately below the Left *Subclavian Artery.* In Adults, .this  
Duct is shrunk up and closed, and appears only like a short  
Ligament adhering by one End to *tkaeAcrta,* and by the other  
to the *Pulmonary Artery*; so that, in reality, it deserves no I  
other .Name, than that; of *LigamentumArteriosum.* This is  
referr'd to, but not well express’d, at *Fig.* 3. *Tab. 5.*

*The* **BRONCHIAL ARTERIES. -**

The *Bronchial Arteries* go sometimes from the sore Side of  
the superior descending *Aorta,* sometimes from the first Inter-  
costal, *Tab.* 5; *Fig.* 29. and sometimes .from the *Artcria Oeso-  
phageea.* Sometimes they arise separately from each Side, to go  
to each Lobe of thefeungS ; and sometimes by a .small common  
Trunk,, which afterwards separates towards the Right and Left  
Hand, at the Bifurcation of the *siifpcra Arteria,* and accompanies  
the Ramifications of the Bronchia. , . ..... .

The *Bronchial Artcry,* on the Lest Side, often comes from the  
*Aorta,* while she other arises from the *superior Intercostal* on  
the same Side; which Variety is Owing to the Situation of the  
*Aorta.* Sometimes there is another *Bronchial Artery,* which  
goes out from the *Aorta* posteriorly, near the *superior Intcrcostal,  
above tiaePronchialis anterior.*

In the Year I 7 I9. I observ'd a Very plain Communication Of  
the Branches os the Left Pulmonary Vein with, the Branches  
of an *Artcria Oesophagcea,* which came from the first Lest inter-  
*costal,* together with a *Bronchial Artcry* os the same Side.

The *Bronchialis* gives a small Branch to the neighbouring  
Auricle of the Heart, which comrtitinicateS with the *Artcria  
Coronaria-. - - - ἐν*

In the Year I7 I9i or I72O. I discover'd 4 Communication,  
hetween the *Left Bronchial Artery* and the *Vena Azygos*; and in  
the Month of *August, iyfloi.* I saw a Branch of this *Bronchial  
Actcry* join'd by an Anastomosis to the Body of the *Azygos.*

*The* **ARTERIES** *of the* **CESoPKAGUSi**

The *Oesophagace* are generally two or three in Number,  
sometimes but one. They arise anteriorly from the *Aorta  
Descendens,* and are’ distributed to the CEsophaguS. Some-  
times the uppermost- *Oesophagaea* produces a *Bronchial Artcry.*

*The inferior* **INTERCOSTAL ARTERiESi**

The *inferior Intercostali, T.ab. ζ.* FrT.3i.3I. are common-  
ly seven or eight on each Side, and sometimes ten, when the  
superior Intercostals arise likewise from the *Aorta Descendens ;*in which Case these run obliquely upward, as has been already  
said.

They arise along the back Side os the descending *Aorta, in*Pairs, all theWay to the Diaphragm; and run transverfly toward  
each Side, on the Bodies of the Vertebrae. Those on the  
Right Side pass behind the *Vena Anygos',* and afterwards they ail  
run to the Intercostieal Muscles, along- the lower Edge of **the**Ribs, all the Way to the Sternum, or near it.

τ They send Branches to the Pleura, to the Vertebral Muscles,  
to those Muscles which lie on the Outsides of the Ribs, and to  
the upper Portions of the Muscles of the Abdomen; and they  
Communicate with the *Arteriae Epigastricae* and *Lumbares.*

Sometimes instead os going out from the *Aorta* in Pairs, they  
arise by small common Trunks, which afterwards divide, and\*  
send an *Artcry* to each neighbouring Rib.

Before they take their Course along the Ribs, each of them  
detaches one Branch between the transverse Apophyses on both  
Sides,- to the Vertebral Muscles, and another which enters thelr  
great Canal of the Spina Dorsi. Each of these latter Branches  
divides at least into two small *'Artcries,* one of winch runs trans- ’  
verfly on the anterior Side, of the Canal, the other on the poste--  
rior-Sider- Both of them communicate with the like *Arteries.*from the other Side of the Spine, in such a manner, as to form :  
a kind of *arterial* Rings ; which likewise communicate with  
each other by other small Ramifications. The same into be"’  
observed .in the *Arteria Lumbares. ......... . ..*

Afterwards each *Intercostal Antcry,* having .reach'd- the Mid--  
die of the Rib,, or a littie more, divides-into- two principal  
Branches, one internal, the other external Soon after this '  
Division, *tfoesArtccies* that run upon the false Ribs, separate aY  
little from them, being gradually hent downward one after an- d  
other,--and are spread upon the abdominal Musclesi - They are  
likewise distributed to other neighbouring Muscles, and parti-  
cularly to those of the Diaphragm, almost in the same manner  
with the *Artcria Phrenica.* -They also communicate with the -  
*Lumbares,* and sometimes with Branches of the- *Hypogastrica. -: ~ '*

**AXILLARY ARTERIES. - . - : -**

The *Subclavian Artcry,* having lest the Thorax immediately  
above the first Rib, in the Interstice left between the Portions  
os the Scalenus, there receives the.Name,os *Axillaris,* hecause it  
passes under the *Axilla. .*

t In this Course it gives off; from its Inside, a small Branch to  
the Inside of the first Rib, and afterwards four or five princi- ;  
-pal Branches;.the *Thoracica Superior,* or *Mammaria Externa,  
Tab.* 5. *Fig.* 21. 2I. *Thoracica Iniferior, Museularis,* or *Sca-  
pularis Externa, Scapularis Interna,* and *Humeralis.*

*’ - The* **SUPERIOR THORACIC ARTERY.**

The *Superior Thoracica,* or *External Mammary Artcry, Tab.  
5. Fig.* 2I. 2I. runs down in a winding Course on the lateral  
Parts of the Thorax, and crosses the Ribs. It gives Branches  
to the two Pectoral Muscles, to the Mamma, Musculus Suh-  
ClaVius, Serratus Major, Latissimus Dorsi, and to the upper'  
Portions os the Coraco-Brachialis, and Biceps. - . ' -

’ These Branches are sometimes separate for some Space; and .  
one of them particularly runs down hetween the Deltoides and  
Pectoralis Major, together with the Vena Cephalica, to which  
it adheres very closely; the Extremity of it piercing the Coat  
os that Vein, as if there were an Anastomosis between them?'  
Another sometimes runs hetween the Musculus Brachheus, and  
AnconaeuS internus, winch communicates with a Branch os the  
*Radial Antcry. -*

*The* **INFERIOR THORACIC ARTERY.**

. The *Iniferior Thoracic Artcry* runs along the Inferior Costa-  
of the Scapula, to the Musculus Subscapularis, Teres Major  
and Minor, Infra SpinatuS, Latissimus Dorsi, Serratus Major,  
and the neighbouring intercostal Muscles, communicating with  
the *Artcrdae Scapulares. ‘*

*The* **SCAPULARY ARTERIES.**

The *External Scapulary Artcry* passes through the Notch in  
the Superior Costa os the scapula, to the Musculus Supra  
SpinatuS, and infra SpinatuS, Teres Major and Minor, and to  
the Articulation of the Scapula with the Os Humeri.

The.seterinrZ *Scapularis* arises from the *Axillary Art cry* near-  
the *Axilla,* and runs backward, to he distributed to the *Subsea-,  
pularis,* giving Branches to the Serratus Major, to the Axillary  
Glands, and to the Teres Major, upon which it is ramified in  
different manners. It likewise sends Branches to the Infra Spi-  
natus, and upper Portion of the Anconaei.

*' - The* **HUMERAL ARTERY.**

The *Hiumcral Artcry* arises from the Lower and Foreside  
os the *Axillaris,* and runs backward between the Head of the  
Os Humeri and Teres Major, surrounding the Articulation,,  
till it reaches the posterior Part of the Deltoides, to which it is  
distributed. . .

During this Course, Tt gives several Branches to the superior  
Portions of the An co nasi, to the Capsular Ligament of the Joint  
of the Shoulder, and to rhe Os Humeri itself, through several  
Holes immediately below the great Tuberosity of the Head of  
that Bone. It likewise communicates with the *Scapulary Ar-  
tery.*

' Opposite to the Origin of this *Humeral Artery,* the *Axillaris*fends off another small Branch, which runs in a contrary Di-  
section between the Head of the Os Humeri, and the common  
Upper-part of the Biceps and Coraco-Brachialis; and having  
given Branches to the Vagina and Channel of the Biceps, and  
to the Periosteum, afterwards.joins the principal *-Hameralis. ’’*

TherBRACHIAL ARYERY. See *T.ab. 5. Fig.* 23, *id, 25,*ῖ... 26, 27. 7 .- -

The *Axillary Artery,* having given off these Branches, Pastes -  
immediately behind the Tendon of thnPectoralis Majors where,  
it changes its former Name for that *os. Artcria Brachialis, It*runs down on the-inside of the Arm over the Musculus Coraco- -  
Brachialis, and AnconaeuS internus, and along the inner -Edge :  
of the Biceps, hehind the *Vena Basilica,* giving small-Branches '  
oninth Sides to the neighbouring Muscles,- to. the Periosteum,  
and to the Bone. .... . ...so:..-si- *ἐν i*

- Between *thee Anilla* and Middle of the Arm, it -is covered „  
only by the Skin and Fat; but afterwards it is hid under the  
Biceps, and runs obliquely forward as it descends, heing. at some '  
Distance from the internal Condyle ; hut it does not reach the .  
Middle of the Fold os the Armi .u’ i  
"Between the *Aniila aud* tins Place, it-sends off many Branches3to the Infra Spinatut, Teres Major and Minor, Subscapularis,"  
Latissimus Dorsi, Serratus Major, and other neighbouring Mtff-  
cles, to the common Integuments; and even to the Nerves..  
Below the Fold of the Arm, it divides into two principal1Branches, one called *Artcria Cubitalis,* the other *Radialis. -*

From its upper and inner Part, it sends off a- particular-  
Branch, which runs, obliquely, downward and backward over  
the Anconaei, and then turns forward" again near the external  
Condyle, where it communicates with a Branch os the *Artcria  
Radialis. —* . λ ...i- ς ..... . . ΰ

- Immediately below the Insertion of the Teres Major, ingives'  
off another Branch,-which runs from within outwards,; and '  
from behind forward, round the Os Humeri, - and descends ob-  
liimely forward between the Musculus Brachiasus, andAnconaeus  
Externus, to both which it-is distributed in its Passage. Having  
afterwards reached the external- Condyle, it- unites-with the  
Branch last-mentioned,- and likewise, communicates .with a  
Branch of the *Arteries* of the Fore-arm, so that there is here  
a triple Anastomosis. .

About the Breadth of a Finger below this second Branch,  
the*' Brachial Artery* sends off a third, which runs down-toward  
the internal Condyle, and communicates with other Branches  
of the *Arteries of* the Fore-arm, as we shall see hereafter.

About the Middle os the Arm, or a little lower, much about,  
the Place where: the *Brachial Artcry* begins to he covered by the  
Bic-eps, it sends off-a Branch, which is distributed to the Pe-  
riosteum, and penetrates the Bone, between the Mufeulus-  
Brachiaeus and AnconaeuS Internus. ,

About an Inch lower, it gives off another Branch, which,  
having furnished Ramifications to the Anconseus Internus, rims  
over the inner Condyle, and likewise communicates with  
Branches of the *Art cries* of the Fore-arm.

Having got helow the Middle of the Arm, the *Brachial Ar-  
tery* detaches another Branch, which runs behind the inner Con-  
dyle in Company with a considerable Nerve; and, having passed  
over the Muscles inserted in this Condyle, it communicates,  
with that Branch of the *Cubital Artery* winch encompasses the  
Fold of the Arm.

- A littie lower, it sometimes sends out another Branch, which  
passes on the-Foreside of tho inner Condyle, and then commu-  
nicates with a Branch which runs .up from the *Cubital Art cry.*These three communicating Branches are termed *Collatcral  
Arteries.*

The common Trunk of the *Brachial Artery,* having reached  
the Fold of the Arm, runs together with a Vein and a Nerve  
immediately under the Aponeurosis of the *Biceps,* and pastes  
under the *Varta Mediana,* detaching Branches on each Side to  
the neighbouring Muscles.

About a large Finger's Breadth beyond the Fold of the Arm, '.  
*this Artery* divides into two principal Branches, one inner or  
posterior, named *Cubitalis-,* the other outer or anterior, named  
*Radialis,* as has been already said.. .

. From this Bifurcation the *Brachial Artcry* fends Branches  
on each Side, to the Supinator Longus, Pronator Teres, Fat  
and Skin. It sometimes, though very rarely, happens, that this  
*Artcry* is divided from its Origin into two large Branches, which  
ran down on the Ann, and afterwards on the Fore-arm, where  
they have the Names of *Cubitalis* and *Radialis.*

*The* **CUBITAL ARTERY.**

- The *Cubital Artcry* sinks in hetween the Ulna, and the up-  
per Parts of the Pronator Teres, Perforatus, Ulnaris Gracilis,  
and Radialis Internus; then leaving the Bone, it runs down be-  
tween the Perforatus and Ulnaris Internus all the way to the  
Carpus, and great transverse Ligaments. In this Course it  
winds and turns several Ways, and fends out several Branches.

The first is a small *Artcry* which runs inward to the inner  
Condyle, and then turns upward like a kind of Recurrent, to  
communicate by several Branches with the *Collatcral Art cries  
of* the Arm already mentioned, and particularly with the third.  
A little lower down, another small Branch goes off, which,  
having run upward a littie way, and almost surrounded the Ar-  
ticulation, communicates with the second *Collatcral Artery* of  
**the Arm, hetween the Olecranum and inner Condyle.**

**A ι...**

Afterwards the *CrhiealAescr-y'foeuioi^.,* in’its Course between  
the Heads, os: the Idina and Redins, reached the Interosseous,  
Ligament, Jshods off two pripaipalTranches, one internal, the  
other external, which J call *tfoesittarassema Arteries.* Of the Fore-  
arm. ς.Λ-.. .. ; ..i.-t *A:*

The *External Artery* pierces the Ligament about three Fin-,  
gers Breadth below the Articulatiori; and presently afterward  
gives off a Branch, which runs up, dike a Recurrent, toward  
the external Condyle of the'OS Humeri, finder the Ulnaris.-  
Externus, and Anconaeus Minimus,, to which it in dijiributed,-  
as also, to the Supinator Brevis - and; it communicates with the;  
*Collateral Arteries* of the Arm on the same Side, -

Afterward thin *External Iatcressecus Artcry* runs down on. the  
Outside of the laigamens, andisoistrihuted to the Ulnaris. Ex-:  
ternus. Extensor Digirorum. (Communis, and to thej ExtensoreS:  
PolliciS, Tndicis, and Minimi Digiti, com mUniCating with,  
some Branches: os the *iaterrtal sm.crresseous siricry.^,^-.*

Having reached the lower-extremity os. the-XJljia,-it unites  
with -a Branch Of the *InlernalLntcroesseous Anstery,* which at this  
Place runs from wjthin.outward; and is distaihhted together  
with it on the\*convex Side osuthe Carpus, and Back of the  
Hand, communicating with the *Arteria Radialis,* and with a  
Branch of;.the *Cubitalis,* which willhe mentioned hereafter, i V.

By these Communications, *yhis: Artery* forms; a; sort *of*. irre-  
gular Arch, from whence Branches .are detached .to the exter-  
nal interosseous Muscles, and to the external laterssParts of the  
Fingers," *..'so .r.gul- . -*Ἀ ... ' ' V " '

..- The *Internal Interosseouss.Arlory* runs down Very close to the:  
Ligament, .till jet reaches below the Pronator;Teres, between-  
which and the Pronator Quadratus it perforates the .Ligament,  
and goes to the convex Side of the Carpus, and Back “of the  
Hand, where: it .communicares;.with the *External Interosseous  
Artery,* with j the *Radialis,* and internal Branch^of,the *Cur  
bitalis. . ..* .... ... . . - . : ) » j,; .suss.sssu

From .the Origin of the two *Inter office, .ties Cubital Art cry*runs down between the Perforatus, Perforans, and Ulnaris In-  
ternus, along the Ulna, sending Branches to the neighbouring  
Parts. . Below the *Internal Intcressea,* it sometimes fends off a  
Branch, .which runs, down hetween the Flexor Pollicis,' Radialis  
Internus, and Perforatus, to which it is distributed all . the way  
to the Carpus,, where it runs undec theinternal annular Liga-  
ment, and communicates on the Hand with Branches Of .the  
*Arteria RadtaliA r-- .*

: Afterward the *Cubital Artery passes* over theinternal transverse  
Ligament of the Corpus, by the Side of the Os Pisiforme, and  
having furnished the Skin, Palmaris Brevis, and Metacarpus,  
**it** flips under the Aponeurosis Palmaris, giving off one Branch  
to the Hypothenar Minimi Digiti, and another,.which runs to-;  
ward the Thumb/between the Tendons of the Flexors of the  
Fingers, and the Basis os the metacarpal Bones.

. It likewise sends off aBranch, winch, running between the  
third and fourth Bones of the Metacarpus, reaches to the Back  
of the Hand,, where it communicates with the *External Jntcr-  
ojscous Artcry.* Afterwards having supplied the interosseous  
Muscles, it communicates with the *Radialis-,* and they heth  
form an *Arterial Acch iit* theHollow of the Hand, in the fol-  
lowing manner:

. . The *Cubitatis,* having got about two Fingers Breadth heyond  
the internal annular Ligament of the Carpus, forms an Arch,  
the convex Side of which is turned “to the Fingers, and com-  
monly sends off three or four Branches, The first goes to the  
inner and back Part of the little Finger; and is sometimes a  
Continuation or Production of that Branch, which goes to the  
Hypothenar. \_ jo

. The other three Branches run in the interstices of the Four:  
metacarpal Bones, near the'Heads of which, each of them is.  
divided into two Branches, which pass along the two internal  
lateral Parts of each Finger,, from the Forefide of the iitrle  
Finger, to the posterior Sine of the Index inclusively; and at  
**the** Ends of the Fingers.these *Digital Artcries* communicate  
- and unite with each other. ;

r Sometimes .the Arch of the *Cubital Artcry* terminates by a  
particular Branch in the Middle Finger, and in that Case it  
communicates with the *Radial Artery,* which makes up what  
the other wants; ’ ss '

; This Arch feuds likewise from its concave Side, toward the  
second Phalanx of tire Thumb, a Branch for the lateral internal  
Part thereof, and then ends near the Head of the first metacar-  
pal Bone, by a Communication with the *Radialis,* having first  
given a Branch to the Foreside os the Index, and another to.  
the Side os the Thumb next the former. These communicate  
at the Ends of the Fingers with the neighbouring Branches,  
as in the other Fingers. \_

. This Arch sends likewife -small Twigs to the interosseous  
Muscles, to the Lumbricales, Palmaris, and Io other neigh-  
bouring Parts; and lastly, to the Integuments. ..

*The* **RADIAL ARTERY.**

The *Radial Artery* begins by detaching a small Branch, which  
runs upward like .a Recurrent,, toward the Fold of the Arm,.

and turns backward round the external Condyle, Communi.»  
Cattng with the neighbouring Branches from the Trunk of. rhe  
*Brachial Artcry,* especiafly-with the. first collateral Branch on.  
thatSide, : ssi;. . :. . ‘

- It tuns down along thejnside. of the Radins, between the.  
Supjnator Longus, pronator Teres, and **the** integuments,  
gtvin« Branches to these.M.ufcles, and likewise to the Perfora-  
tus,. Perforans, and Supinator Brevis, From thence it mns in  
a winding Course toward, the Extremity of tho Radius, sup.  
plying the*Flexors of.* the Thumb, and .Pronator Quadratus.;

Having reached the Extremity of the Radius, it runs nearer  
the Skin, especially toward, the anterior Edge of the Bone, being  
theSncery which we. there seel when we examine the Pulse.

I At the End os the Radius, it .giyes,off a Branch to the.  
Thenar; and, aster having communicated with the Arch of  
the *Cubital Artery* in the .Paimof the Hand, and sent off-some  
Cutaneous Branches at that Place, it detaches one, along the  
whole internal lateral Part os the. Thumb;

. Afterwards it runs hetween the first Phalanx and Tendons  
of the-Thumb, to the. Interstice, between the. Basis of this first  
Phalanx, and of the first metacarpal Bone, where it turns to-  
ward the‘Hollow of the Hand. *:s 's-.; . .. .*

.. At this Turning, it sends off a Branch to the external late-  
ral Part of the Thumb, which, having reached the End thereof,  
communicates by a small Arch with' che Branch which goes **to**theinternal lateral Part.;

- it likewise fends Branches outward, which run more or less  
tranfrersty between the first two Bones of the Metacarpus and  
the two Tendons of the Radialis Externus / and it communi-  
cates with an opposite Branch of *ffiae .Cabitalis,* together with  
which it furnishes the external interosseous Muscles, and inte-  
guments of the Rack- of the Hand, and convex Side os the  
Carpus. ......

’ Lastly, the *Radial Art cry* terminates in. its Passage over the  
semi-interosseous Muscle of the index, near the Basis of the  
first metacarpal Bone, and as it runs under the Tendons of the  
Flexor Muscles of the Fingers, where it is joined to the Arch  
of the Cubitalis. *........ I t*

It sends off another Branch which runs along the Fore-part  
of the first Bone of the Metacarpus, to the convex Side of  
the index, where it is lost-in the Integuments. ..

; It gives likewife aIBranch, to the internal lateral Part os **the**Index, which at the End. of that Finger joins an opposite  
Branch, winch comes from the Arch ed *she. Cubitalis.* It also  
sends off a small Branch cross the internal interosseous Muscles,  
where it forms a’ kind of small irregular Arch, winch com-  
municates with the. great Arch by several small arterial  
Branches. .

- When the Arch of the *Cubitalis* ends at the Middle Finger, .  
the *Radialis* runs along the inner *or* concave Part of the first  
metacarpal Bone, at the Head of which it terminates by two  
Branches.

One of these Branches runs along the inner and anterior  
lateral Part of the index, the other pastes hetween the Flexor  
Tendons of this Finger and the metacarpal Bone; and, having  
communicated with the cubital Branch of the Middle Finger,  
it advances on the posterior lateral Part of the Index, all the  
Way to the End of that Finger, where it unites again with the  
first Branch.

*The* **DIAPHRAGMATIC ARTERY.**

. The Left *Diaphragmatic Artcry* goes out commonly from  
the *Aorta Descendens,* as it passes between the Crura of **the**small Muscle of the Diaphragm. The Right *Diaphragmatic*comes sometimes from the nearest *Lumbar Artcry,* but mosh  
commonly from the *Caeliaca.* Sometimes both these *Arteries*arise by a small common Trunk immediately from the *Aorta..*They likewise have the Name of *Arterice Phrenicae.*

. They appear almost always in .several Ramifications on the  
concave or lower Side of the Diapbragm, and seldom on the  
upper or convex Side. They give smass Branches to the Glan-  
dulse Renales, or. Capsulae Atrabilarite, winch sometimes com-  
mnnicate with the other *Arteries* that go to the same Part.

They fend likewise small Branches to the Fat which lies  
upon the Kidneys, called the *Membrana Adipose, from* whence  
they have the Name of *Artcrlae Adiposa',* and they sometimes  
come immediately from the Trunk *of* the *Aorta* on one Side of  
the *Mesenterica. Saperior. .*

Besides these capital *Diaphragmatic Arteries,* there are others  
os a subordinate Class, which come from the *Intcrcostales, Mam-,  
martin Jnterruae, Mediasiince, Pericardia,* and *Cceliaca, tis is*observed in the Description os-these *Artcries.. . \* -J*

*The* **COELIAc ARTERY. \* '**

*The Ramifications of this Artery arc not figured sin the Table  
so accurately as they are described by* Winflow.

. The *Cceliac Artery* arises anteriorly, and a littie to the Left  
Hand, from the *Aorta Descendens,* immediately aster its Pas-  
sage through the small Mufcle of the Diaphragm, nearly oppo-  
site to the Cartilage between the last Vertebra Of the Back, and

first of the Loins. The Trunk of this *Artcry* is very short,-  
and, near its Origin, it fends off from the Right Side two small  
*Diaphragmaticae,* though sometimes there is only one, which  
goes to the Right Hand, and is afterwards distributed hethWays,  
communicating with the other *Artcries* of the .same Name, which  
come from the *Intcrcostales* and *Mammaria.* The Left Branch  
sends Ramifications to the superior Orifice of the Stomach, and  
to the Glandula Renalis on the same Side; the Right furnishes  
the Pylorus, and the Renal Gland on the Right Side.

Immediately after this, *sdsaeDcel'taca* gives off a considerable.  
Branch, named *Arteria Pentri culi Coronaria,* and *Gastrica,* or  
*Gastrica Superior-,* and then it presently divides into two large'  
Branches, one toward the Right Hand, named *Artcria Hepa-  
tica ,* the other to the Left, called *Splenica,* which is larger than  
the former.

Sometimes this *Artery* is divided into these three Branches -at  
the same Pisce, Very near its Origin; the Trunk going out  
from the *Aorta* almost in a strait Line, and the Branches from  
the Trunk almost at Right Angles, like Radii from an Axis,  
whence this Trunk has been called *Axis Artcria Coeliaca.*

*The* **CORONARY ARTERY** *of the* **STOMACH.**

The *Coronary Artery* of the Stomach goes first to the Left  
Side of that Organ, a little beyond the superior Orifice, round  
which Orifice it throws Branches, and also to every Part of the  
Stomach near it ; and these Branches communicate with those  
which run along the Bottom of the Stomach to the Pylorus. ..

Afterwards it runs on the Right Side of the superior Orifice,  
along the small Curvature of the Stomach, almost to the Py-  
lorus, where it communicates with *ssae Artcria Pylorica* ; and,  
turning towards the small Lobe of the Liver, it gives off some  
Branches to its '

Then it advances, under the *Ductus Vinosus,* to the Left  
Lobe of the Liver, in which it loses itself near the Beginning  
Os the just mentioned Ljuct, having first given off some small  
Branches to the neighbouring Parts of the Diaphragm and  
Omentum. ’

*The* **HEPATIC ARTERY.**

As soon as the *Hepatic Artcry* leaves the Coeliaca, it runs to  
the upper and inner Part of the Pylorus, in Company with the  
Vena Portae, sending off two Branches, a small one called *Ar-  
tcria Pylorioa,* and a large One, named *Gastrica Dextra,* or  
*Gastrica Mayor.*

The *Pylorica* is ramified on the Pylorus, from whence it has  
its Name; and, having distributed Branches to the neighbouring  
Parts of the Stomach, which communicate with those of the  
Right *Gastrioa,* it terminates on the Pylorus by an .Anastomo-  
sis with the *Coronary Artery of* the Stomach. j

. The Right *Gastric. Artcry,* having passed behind and beyond  
the Pylorus, sends out a considerable Branch named *Artcria.  
Duodenalis* or *Intestinalis,* winch sometimes comes from the  
Trunk of the *Hepatica,* as we shall see hereafter. Afterwards this  
*Gastric Artery* runs along the Right Side of the great CurVa-  
sure of the Stomach, to the neighbouring Parts of which, ori.  
both Sides, it distributes Branches. - .

These Branches communicate with those os the *Artcria Py-  
lorica,* and of the *Coronaria Fentriculi,* and with the Right.  
*Gastro-epiploicee,* which furnish the nearest Parts of the Omen-  
tum, and communicate with the *Mesenterica Superior.* After  
this the Right *Gastric Artery* ends in the Lest, which is' a  
Branch of the *Splenica.*

The *Duodenal* or *Intestinal Artcry* runs along the Duode-.  
num on the Side next the Pancreas; to both which it furnishes  
Branches, and also to the neighbouring Part of the Stomach.  
Sometimes this *Artcry* goes Out from the *Mefentcrica Supcrior,*and sometimes it is double.

*Tiae .Hepatic Artery,* having sent out the *Pylorica* and Right  
*Gastrioa,* advances behind the *Ductus Hepaticus,* toward the  
Vchcula Fellis, to which it gives two principal Branches called  
*Arteries Cysiicay* and another named *Bilaria,* which is lust in  
the great Lohe of the Liver.

z Afterwards this *Artcry* enters the Fissure of the Liver, and  
Joins the Vena Portae, with which it rims within a membra-  
nous Vagina, called *Capsula Glessenii,* and accompanies it thro\*  
the whole Substance of the Liver by numerous Ramifications,  
which may he termed *Artcria Hepatica Propria.*

. Before it enters the Liver, it gives small Branches to the  
external Membrane of this Part, and to the Capsula Gliffonii.  
The *Gastric* and proper *Hepatic Antcries* come sometimes from  
the *Mefentcrica Superior,* when the ordinary Ramifications are  
wanting.

***. . The* SPLENIC ARTERy. .**

immediately after the Origin of the *Splenic Artery* from **the***Ceeliaca,* it runs toward the Left Hand, under the Stomach  
and Pancreas, to the Spleen. It adheres closely to the posterior  
Part of the lower Side of the Pancreas, to which it giVCS several  
Branches named *Arteria Pancreatica,*

- Near the Extremity of the Pancreas, finder the Left Portion  
of the Stomach, the *Splenic Artery* gives off a principal Branch  
call'd *Gastrioa Sinistra* or *Minor,* which runs from Left to  
Right along the Left Portion of the great Curvature of the  
Stomach, giving Branches to both Sides *of this* Portion, which  
communicate with those of the *Coronaria Vintriculi.*

This *Gastric Artery* sends likewise another Branch, at least,  
to the Extremity of the Pancreas, which communicates with  
the other *Pancreatic Arteries.* It also supplies the Omentum  
with Branches, term'd *Gastro-epiploicee Sinistra*; and then -it.  
communicates with the Right *Gastrica,* and from this Union  
the *Gastro-epiploicee Media* are produced.

From this Detail we learn, that the *Artcria Coronaria Ventrio  
culi, Pylorica, Intestinalis,* both *Gastrioa, Gastro-epiploicasi*and consequently the *Hepatica, Splenica,* and *Mesenterica,*Communicate all together.

Afterwards the *Splenic Artery* advances towards the Spleen,  
in a Course more or less contorted; but before it arrives at  
that Part, it gives two Or three Branches to the large Extremity’  
of the Stomach, which are commonly call'd *yafa Brevia,* and  
one to the Omentum, *nntned Epiploica.*

.. At the Spleen this *Artery* divides into four or five Branches,  
which enter that Organ, after having given some small Twigs  
to the neighbouring Parts Of the Stomach and Omentum.

*The superior* **MESENTERIC ARTERY.**

The *supcrior Mesenteric Artery, Tab. esc Fig.* 43. arises  
anteriorly from the lower Portion of the *descending Aorta,* a  
Very littie Way below the *Caeliaca,* going out a little towards  
the Right Hand, but bending immediately afterwards to. the'  
Left.

Near its Origin it gives off a small Branch, which, dividing  
into two, goes to the lower Side of the Head of the Pancreas,  
and neighbouring Part of the Duodenum, communicating with.  
the *Intestinalis* by small Arches, and Areohe or Mashes.

- Afterwards it passes over the Duodenum, hetween this Inte-- .  
stine and the Meseraic Vein, hetween the two Laminae- of **the**Mesentery; and then hending, in an oblique Direction, from  
Left to Right, and front above downward, by Very small De-.  
Sees, it advances toward the Extremity of the Iseum. By this.

curvation it forms a kind of long Arch, from'the convex Side  
Of winch a great many Branches go out.

These Branches are sixteen or eighteen in Number, or.  
thereabouts, and almost all of them are bestow'd on the small  
Intestines, from the lower third Part of the Duodenum to the .  
Caecum and Colon. The first Branches are Very short, and  
from thence they increase gradually in Length all theWaytothe  
Middle Of the Arch ; the rest diminishing again by small De-  
grees. - . 0

As thay approach the Intestines, all these Branches commu-u  
nicate first by reciprocal Arches, then by Areohe and Mashes  
of all kinds of Figures, from which is detach'd an infinite  
Numher of small Ramifications, which surround the Intestinal  
Canal like an annular Piece Of Net-work. . .

These Arches and Mashes increase in Numher proportionably  
to the Length of the Branches, and their Size diminishes gra-  
dually as they approach the Intestines. i

The first Branches from the convex Side of the Mesenteric  
Arch, which are Very short, 'supply the Pancreas and Melo-'  
colon, and communicate with the *Duodenal Artery.* The last tBranches go to the Appendicula Vermiformis, and send a Por-  
tion of an Arch to the Beginning of the Colon.

The considerable Branches from the concave Side of **the**Mesenteric Arch are seldom above two or three In Number;.  
but hesore they arise a small Branch goes out to the Duodenum,  
and gives some Very small *Arteries* to the Pancreas. t

The first considerable Branch from the concave Side of **the**Arch goes into the Mesocolon, towards the Right Portion of .  
the Colon, being first divided into two Branches; the fust of  
which runs along the whole superior Part of the Colon, where  
it forms the famous Communication with the *Mefentcrica Ins.e- -.  
rior*; and might be named *Artcria Colica supcrior.* The other  
Division of tins Branch runs down on the Right Portion of the-  
Colon.

The second principal Branch, having run for some Space thro\*  
**the** Mesentery, divides into three Branches ; the first of which  
goes to the lower Part of the Right Portion of the Colon,  
where it communicates with the second Division of the first  
Branch: The second goes to the Beginning of the Colon, where  
it communicates with the first, and to the Intestinum Cecum.

The third Division of this second Branch, having commu-  
nicated with the second, gives small Twigs to the Caecum, Ap-.  
pendicula Vermiformis, and Extremity of the Ileum. After-,  
wards it communicates with the Extremity of the Arch, or  
curve Trunk of the *supcrior Mesenteric.*

All these Communications are by Arches and Mashes, as in.  
those Branches that come from the convex Side of the Arch -  
and it is to he observ’d in general, that all the Branches of the*Mcscnterica supcrior use* disposed according to the Folds of the  
Mesentery, and Circumvolutions of the intestines; giving off

**Branches, through their whole Course, to .theLaminae os the  
Mesentery, its Cellular Substance, and to the Mesenteric  
Glands.**

*The inferior***'MESENTERIC ARTERY.**

The lower *Mesentcric Artery, Tab. 5. Fig.* 45. goes *out*anteriorly from the *Aorta Descendens infcrior,* about a Frnger’s  
Breadth or more above the Bifurcation, and below the *Sperma-  
tic Arteries ,* and having run about the Length of an inch, or  
something more, it is divided into .three or four Branches,  
which gradually separate froth each other.

The first dr superior Branch, about an inch from its Origin,  
divides into two Branches; the first of which runs along the  
Left Portion of the Colon, and forms the Communication of  
the two *Mesentcric Arteries* already mention'd. It may be named  
*ArceriaColica Sinistra.* The second Branch, having commnni-  
rated with the first, runs down upon the fame Portion of the  
Colon.

The middle Branch, having run the same Length with the  
first, divides into two Branches; one Of which passes upward  
on the Extremity of the Colon, communicating by Arches with  
the second Ramification of the superior Branch; the other runs  
down on the Extremity of the same intestine.

When there is another middle Branch, it goes to the first  
Part of the double Curvature of the Colon, by a like Distribu-  
tion and Communication from above downward.

The lower Branch goes to the second Portion of she Colon,  
or to both,, when the second middle Branch is waning, and  
fends up a Branch winch Communicates with the foregoing.

It sends another considerable Branch downward, call'd *Arte-  
ria Hiemorrbardalis Interna,* which runs down hehind the Inte-  
stinum Rectum, to which it is distributed by several Ramifica-  
tions ; and it Communicates with the *'Arteria Hypogastrica.*

*Trie* **RENAL ARTERIES.**

*ThCRaenal Arteries, T.ab.* 5. *Fig.* 49.49. call’d commonly A muf.  
*gents,* are ordinarily two in Number, and go out laterally from  
the inferior descending *Aorta,* immediately under the *Mesente-  
rica superior,* one to the Right Hand, the other to the Left;  
The Right is situated more backward, and is longer than the  
Left, because of the Vena Cova, which lies on the Right Side,  
hetween the *Aorta* and the Kidney. \_

They run commonly without Division, and almost horizon-  
tally, to the Kidneys ; into the Depressions of which they enter  
by several Branches, winch form Arches in the inner Substance  
of these Viscera.

From these Arches numerous small Branches go out toward  
the Circumference, or outer Surface of the Kidneys. Some-  
times there is more than one *Artcry* On each Side; sometimes  
’ this Augmentation is only on one Side; and these supernume-  
**rary** *Arteries* come sometimes immediately from the *Aorta,* and  
enter at the upper or lower Part of the Kidneys.

. Ordinarily the Right *Renal Artery* passes hehind the Vena  
Cava and Renal Vein on the other Side, and the Left *Artcryq*first hehind and then hefore the Vein. Sornetirnes they send  
Branches to the Glanduhe Renales, Membrana Adiposa of the  
Kidneys, and even so the Diaphragm.

*The* **CAPSULAR ARTERIES.**

The *Arteries* of the Renal Glands, which may he term'd  
*Arteriae Capsulares,* arise sometimes from the *Aorta,* above the  
*Artcria Renalis*and give out the' *Art aria Adipifa,* which go  
to the Fat of the Kidneys, Sometimes they come from the  
Trunk of the *CcBliaca.* The Right *Capsular Artcry* comes most  
commonly from the *Arteria Renalis* of the same Side, near its  
Origin; the Left froth the *Aorta,* above the *Renalis.*

*'. The* **SPERMATIC ARTERIES.**

‘ The *Spermatic Artcries, Tab.* 5. *Fig. SI. ^1.* are domtnon-  
ly two in Number, sometimes more. They are very small,  
- and go out anteriorly from the *Aorla Descendens inferior,* near

each other, about a Finger's Breadth below the *Arteria Renales,*inore or less, between the two *Mesentericas,* orb etwee n the  
*Renales* and *Mesentericae Inferiores. .* Sometimes one is higher,  
or placed more laterally, than the other.

ς They send off, to the common Membrane of the Kidneys,  
small Branches named *Artcria Adiposa ,* and afterwards they run  
' down upon the Psoas Muscles, on the fore Side of the Ureters,  
hetween the two Laminae of the Peritonaeum. \.

They give several considerable Branches to the Peritonaeum,  
chiefly to those Parts of it winch are next the Mesentery ; and  
they communicate both with the *Mefentericee* and *Adipofoe.*They likewise, send small *Arteries,* to the Ureters.. .ss

Afterwards they pass, in Men, thro' the tendinous Openings  
of the Abdominal Muscles in the Vagina of the Peritonaeum;  
and are distributed to the Testicles and Epidsdymes, where they  
Communicate with a Branch of the *Iliaca externa.*

in Women they do not go out of the Abdomen, but are  
**distributed to the Ovaria aRd Uterus, and communicate with**

**I ' - .. ..... A 2**

Branches of the *Hiypogastrioa,* at the jagged Extremities of the  
Tubae Fallopianse.

***The* LUMBAR AHTEtiiES.**

, The *Lumbar Arteries, Tab. esc Fig.* 50. *go .out* posteriorly  
from the inferior descending *Aorta,* in five or six Pairs, or inore,  
inuch in the same manner with the *Intcrcostats.*

They may be divided into Superior and Inferior. The Super  
rior send small Branches to the neighbouring Parts of the Dia-  
phragm and Intercostal Muscles, and supply the Place of *Semis,  
nsitercosidl Arteries.* Sometimes those Pairs go out by a small  
common Trunk, and not separately.

.They are distributed on each Side to the. Psoas Muscles, **to**the Quadrati Lumborum, and to the oblique and, transverse  
Muscles of the Abdomen ; and by perforating the oblique Musi.  
Chis, they become *extcrnal Hypogastrio Arteries.* They go  
likewise to the Vertebral Muscles, and to the Bedies of the Very  
tebrte, and enter the Spinal Canal thro' the lateral Notches, try  
go to the Membranes, *etc.* forming Rings much in the same  
manner with- the Intercostals; and they likewise **give small**Twigs to the Ν erves.

*The* **ARTERIAE SACRAE.**

The *Arteria Sacrae, Tab.* 5. *Fig.* 52. Ao but commonly  
from the back Part of the inferior descending *Aorta,* at **the**Bifurcation. Sometimes they arise higher from the *Lumbar esc*and sometimes lower front the *Tliaca.* They are two, three;  
or sour in Number *y* spd sometimes but one. They are ramin  
fied on the Os Sacrum, and on the neighbouring Parts of **the**Peritonaeum, Intestinum Rectum, Fat, *etc.* and enter the Ca-  
nal of the OS Sacrum thro' the anterior Holes, being there  
distributed toward each Side. ’ They likewise send small *Art An  
ries* to the large Fasciculi of Nerves, which go, out .thro' **.the**Holes of the OS Sacrum, and they penetrate the inner Substance  
of that Bone, . . : .

*The* **ILIAC ARTERIES.** *Tab. Se Fig. 53. 53.*

*The* inferior descending *Aorta* ends at the last Vertebra os  
**the** Loins, and sometimes higher, in two large lateral Branches,  
one on the Right Hand, the other on the Left,, call’d *Artcria  
Tsiaca* ; each of which is a. common Trunk so two *Tfrlensirser  
sties os* the same Name. This Bifurcation hea on the anterior  
and Lest Side of that of the Vena Cava. See *Tab.* 4. *Fig.* 13.»  
I3. ' ‘su ' ’ ’ ;. .ς,.οὐρ. ........ -- Ἀ .

The primitive *Iliac Arteries* divaricate gradually as they dtio  
scend, advancing obliquely toward the anterior and lower Part  
**os** the OS Ilium, without any considerable Ramifications, for  
about the Breadth of three Fingers ; except a sew very small  
*Arteries* that go to the .OS Sacrum,, some of which enter by the  
tipper Holes, and are distributed like the *Artcria Sacra ,* while  
others emerge again throi the posterior Holes, and go to the  
neighbouring Muscles, *etc.* They likewisqgive small *Arteries*to the Peritonaeum, to the Coats of .the Veins,,and to the Fat  
and Ureters, behind which the J/scYTrurshsspass. κ.. .

The Right *Iliac* Trunk passes first on the fore Side of the  
Origin.of the Left Iliad Vein, and rims down. on the foresiide  
of the Right Vein, almost to the Place where it goes out of **the**Abdonien, itSCourse being there directed Inorejhwardly..: The  
Left Trunk goes down likewise before the Lest Vein, bur lies  
a littie toward the Inside as it leaves the Abdomen:. *'ι..*

About, three Fingers Breadth from their Origin each *Iliac*Trunk is divided into two .secondary *Arteriis, Cssae externaj,  
T.ab.* 5. *Fig.* 54. 54. the other *internal. Tab. S. Fig.* 55. 55i  
The. *external Artery* has no particular Nanie; the *internal* is  
term'd *HiAoogastric a,* which often appears to be no more than *μ*Branch of the other in Adults; but in young Children, and  
especially in the Foetus, *the Mypognstnic Artcry* looks like the  
Trunk, and the other like a Branch.’ y . .. po . ,χ  
*. LfloexlernalsoiacasTob.* 5. *Fig.* 54... 54\* on, each fitde runs  
down to the Ligamentum Fallopii, onder which it goes out of  
the Abdomen. In this Course it gives . off only 4 few small *Asa  
series* to she Peritonaeum,,,and other Taris near it ; but aS it  
passes out of the Abdomen under .the Ligament, it detaches  
two considerable Branches’, one *internal,,* the other *externas*

**' The** internal Branch Is named *Arteriot Epigastrica, Tithe* 5.  
Fry. 57.57. and goes, out .anteriorly, from the *external Ilsacai*Froin thence it runs obliquely upward, on the Tendon of the  
transverse Muscle, toward the posterior Part sqf the Rectus,  
which it reaches about two or three Fingers Breadth above rhe’  
**Os** Pubss. . . ..

Afterwards the *Epigastric Artcry* runs, uh along the posterior  
or inner Side os this Muscle, sending Ramifications to the Ten-  
dons of the neighbouring Muscles, and then loses itself by a true  
Anastomosis of several RarnificatiohS with the *Mammario Isopor»,*na. It likewise communicates with the *infcrior Intercostals,*which ate spread on the Abdomen. '

It sometimes gives out two particular Branches, one of which,  
. accompany'd by a Nerve, goes thro' the Foramen OVale os the  
Pelvis to the Triceps Muscles; the other runs down to the

Testicles, along with the *Spermatic Artery,* and there cornnin-  
Ideates with it.

The external Branch of the outer *lliaca, Tab.* 5. *Fig.* 58.  
58. goes off laterally from the Outside of *iorat. Artery,* under  
the Ligamentum Fallopii; and from thence to the internal  
Labium of the Os Ilium, where it divides into two, an d st  
ramified on the oblique and transverse Muscles of the Abdomen,  
comm unicaring with the *Arteria Lumbaris. ' :*

Besides thefe two Branches, the *external Iliaca* gives off 4  
sinali Branch internally, under the Ligament which runsto’the  
Vagina-os the Spennauc Cord ; and sometimes another stnall  
Twig goes from the Outside to the Os Ilium, "

The *internal Iliaca,* ΟΓ *Hiypogastrica, Tab. ζ. Fog. ifis ζζ.*having run a little more than a Finger’s Breath inward and back-  
ward ’bends by fmall Degrees obliquely forward, and toward  
the Outside; and afterwards, contracting in its Dimensions; it  
'ends *intyarUmbilical Artery, Tab. p. Fig. §6.* 36. which ought  
to be look’d upon as a true Continuation of the Trunk of the  
*Hiypogastrica. '*

- This *Arteria Umbilicalis* asoends on the Side of the Bladder;  
and having detach’d small Branches to thet, and to the neigh-  
bouring Parts of the Peritonaeum, it contracts; and, in Adults,  
is quite closed up, above the Middle of the Bladder, as in *Tab.  
5. pill.* 56. on the Right Side. It likewise gives Branches to  
the Uterus in Females, and to the Parts about the Pelvis in heth  
Sees: Afterwards it afcends, in form of a Ligament, to the  
Umbilicus, where it joins the *Umbilical Artery* on the other  
Side ; its Name being taken from its Ufe in the Foetus.

From the convex Side of the Curvature of the *Hiyp.ogastria  
. Artery,* four or five principal Branches commonly go out very  
near each other. Sometimes they all arise separately, some.:  
nines by final! common Trunks; and what.is the first Branch in  
some Subjects, is only a Ramification of another principal Branch  
in others; so much does the Number, Disposition, Origin, and  
Distribution of thefe Branches vary in different Subjects. For  
this Reason, I think it is fit to distinguish them by the follow-  
ing proper Namesr *lliaca minor, Glataea, Sciatica, Pudica  
communis, five Pndica Hiypogastrica, and Obturatrix.*

*Tlum lliaca minor,* the most posterior of there Branches, and  
which is often no more than a Branch of the Glunea, passes  
between the last two Lumbar Nerves, and divides into two  
Branches; one of which enters the Canal of the Os Sacrum,  
thro’ rhe lowest large anterior Holes ; the other posies hebind  
theMufculus Psoas, to which it gives Twigs, and behind the  
. Crural Nerve, being afterwards distributed to the Iliac Muscle,  
and to the middle Part of the Inside of the Os Ilium, pene-  
tratiog into the Substance of the Bone, sometimes by one Hole,  
sometimes by more. ”

The *Arteria Glutaa* is commonly very considerable, and  
sometimes the largest of all the *Hypogastric* Branches. Near its  
Beginning it sometimes sends out the *lliaca minor,* and some,  
nines the fmall Branch that goes from thet *Artery* to the Os  
Sacrum, and other Parts fix’d to that Bone. Afterwards this  
*Artery* goes out of the Pelvis in Company with the' Sciatic  
Nerve, thro’ the upper Part of the great Sinus of the Os Inno-  
minatum, below the Musculus Pyrisormis, and is distributed; in  
a radiated manner, to the Gluiaeus Maximus and Medius.

in its Passage it gives some Branches to the Os Sacrum,. Os  
Coccygis, Mufculus Pyriformis, the Muscles of the Anns, and  
to the neighbouring Pans of the Intestinum Rectirm, forming  
a particular *Haniorrhoidalis Interna.* It likewise sends Twigs  
to the Biadder, and parts near itj-and detaches a pretty long  
Branch, which runs down with the Sciatic Nerve. "

The *Arteria Sciatica* gives, first of all, feme Branches to the  
Musculus Pyrisormis, the Quadrigemini,’ and the Os Sacrum,  
and even to the inner Side of the Os Ifchium. It likewise de-  
taches a Branch, which runs under the Mufculus Quadratus, to  
the Articulation of the Os Femoris.

; It passes obliquely over the Sciatic Nerve, and as they both  
go thro’ the great posterior Sinus of the Os Ilium, it detaches  
small *Arteries,* which'are distributed to the inner Substance of  
that Nerve. Afterwards it tuns up in" a radiated manner on  
the Outside of the Os ilium, and is distributed, to the inner Sub-  
stance of that Bone,’ and to the Musculi Glutaei, especially to  
the Medius and Minimus. ' -

The *Pudica Communis,* ced’d commonly *Pndica Interna,*arises sometimes-by \_a Trunk common to *if* and to the *Glutaa,*and gives out twojprincipal Branches.; the first of which passes  
thmi the great Sinus of the OsEiumi'irf Company with the  
*Glutaa* and *Sciatica,* aud then divides into two Branches.

The first Branch goes behind the Spine of the Ischium, be-  
fween the two Ligaments which lie hetweun that Bone and the  
Os Sacrum, and runs on the Inside of the Tuberculum Ischii,  
all the way to the Origin of the Corpus Cavernosum Penis *i*There it divides into several *Artcries,* one of which goes to the  
Sphincter Anu under the Name Of- *Hamsrrhpedalis Externa.*

The rest are distributed to the neighbouring Integuments, to  
the Bulb of the Urethra, and to the Corpus Cavernosum Penis;  
but the last of these'-dureriir, or rather-the Extremity of this

first Branch, ruris from behind forward, over the Neck of **the**Os Femoris, and communicates with a Branch of the *Axteria  
Cruralis. .. -*

The second principal Branch; call'd commonly *Arteria Pu.  
Aiea Externa,* runshetween the Bladder and Intestinum Rectsm,  
and is distributed in Men to the Vesicohe Seminales, Neck of  
the Bladder, Prostate Gland, and neighhenring Parts of the  
Restum. . . . - .

‘' Afterwards it runs under the Os Pubis; osi the Side of a con-  
siderable Vein; which lies directly under the Symphysis, and it  
runs along the Penis between'this Vein and a Nerve,- heino.  
distributed in its Passage to’the Corpus Cavernosum,- and *com-*municating with the *Pndica.minor,* which comes from the *Cru-  
ralis. . '*

This second Branch of the *Pudica major* goes oss. sometimes  
separately from the *Hypogastrico,* especially in Women, being  
distributed to the lateral Parts of the U terus, where it commu-  
nicates with the *Spermatic Artery,* near the jagced Extremity  
of the'Tuba Fallopiana, and to the neighbouring Parts of the  
Vagina. ' . . .. -.. .

The *Axteria Obturatrix* perforates the Obturator Muscles'  
from whence it has its Name, and goes out of the Pelvis at the  
upper Part of the Ligament of the Foramen Ovale ; having first  
sent a small Branch, over the Symphysis of the- Os Ilium and  
Os Pubis, to the Inguinal Glanin and Integuments.

As it pastes by the Museles, it divides, and is distributed to  
the Pectineus and Triceps. *It* likewise sends out another  
Branch, which communicates with that Branch of the *Sciatica*which goes to the Articulation of the Os Femoris., and gives  
sinall *Arteries* to the Holes in the Neck of that Bone.

Afterwards the *Hypogastric Artery* ends in the *Umbilicalis, ai*Bas heen already said.

*The* CRURAL ARTERIES. *Tab.* 5. *Fig.* 6g.

The *Iliac Artery* goes out of the Abdomen between the *Ligo-*menturn Fallopsi and Tendon os the Psoas, at the Union of the  
Os Ilium and 0s Pubis, and there it takes the Name of *Ac-ceria  
Cruralis.*

It sends off, first os all, three small Branches ; one of which,  
call’d *Pudica Externa,* goes over the Crural Vein to the Skin  
and Ligament of the Penis, and to the inguinal Glands, corn-  
municating with the *Pudica Interna.* The second goes to the  
Museulus pectineus; and the third to the upper Part of the  
Sartorius” ’ All these Branches furnish likewise the neighbouring  
anterior integuments. . ' ......

Afterwards the *Crural Artery* hens down on ‘the Head of the  
Os Femoris I. and, he taking a particular Tiirri, gers on the  
Inside of the Crural Vein, about three Fingers Breadth from  
where it goes out of the Abdomen. From its Origin to this  
Place, it is cover’d only by the Skin and Fat, and hes on the  
Pectineus and Triceps Primus. . ’ υ

In changing its Situation it sends out three considerable  
Branches ; one external, one middle, and one internal, 1 They  
all go out, more or less, posteriorly, sometimes by a short  
common Trunk, sometimes by two. '

The external Branch runs on the tipper Side of the-Thigh  
to the Crureus, .Vastus Extcmus, Renins Anterior, Mufculus  
Fasciae Latae, and GlutaeuS Medius, sending, up ABranch to the  
Apex of the great Trochanter, which communicates with **the**first principal Branch of the *Pudica mayor* and *Sciatica,* as has  
been already said. \_ ; . .. A .-

The middle Branch runs duwh oh the inside' of the’ Thigh,  
between the Triceps Muscles,? to which rt glees sevaml  
Branches ; one whereof perforates the second Muscle, 'anil is  
distributed to the Glijheus Maximus, Seminervosus, Semi-  
membranosus. Biceps, ami .to-the neighbouring Integuments.

The internal Branch runs backward on the Quadrigemini,  
towards the great Trochanter s and having detach’d a Branch,  
which goes into the Joint os the Os Femoris; ft runs down-  
ward, and gi ves Branches to ali the Muscles' thatlie on the back  
Side of that Bone, on. of which enters the Bone itself oh one  
Side os the Linea Afpera.- 's' \*;' :

Having sent off all these'three Branches, the *Arleria Crura-  
lis* runs down between the Sartorius, Vastus Internus, anil  
Triceps, giving Branches to all thePans near its Tris covered  
by the Sartorius all, the Vray ;to the lower Part of the Thigh,  
where It isinflecied backward), over the Trstseps.Tcftr'us, a 1st-  
tie above the internal Condyle*A* the Os FeinorTs. Afterwards  
continuing its Course thro\* the Hollow of the Hain, it is cal lid  
*Axteria Poplitea,* being accosiipny’d. fly the Vein of the same  
Name. ’ ' ""so. ' '.‘.ῖ’.” ... .

The *Poplitea,* while in^ thessIam; is cover’d only by the  
Integuments, sending off Branches toward each Side,'which  
run upon the Condyles, and communicate with the louver Rj-  
Indications os the *Artesia Cruralis.* V .

It sends Branches to the Joint, of the Knee, one of whichi  
at least, passes between flic Crucial Ligaments. As st tuns  
down, it fends Branches io the Gastrocnemii' and Popliteris;

- 1,

find,-hawngreheh'dthe back Sideos the Head of the Tima, it  
gives off two Branches, one to each Side. .... Ἀ .

The first or internal Branch’ surrounds the sure Part of-the  
Head of the Tibia, passing hetween the Bone . and \* internal  
lateral Ligament; and, besides seyeral other Ramifications,  
sends up a small Branch, which communicates with *tiae Arteries*that lie round the Condyles of the Os Femoris. - δ᾽.

The second or external Branch runs over the Head of the  
Fsh’ula, and between-the Head of the Tibia and 'external late-  
Ial Ligament of the Knee, surrounding the Articulation all the  
Way to the Ligaments Ofthe Patella, and communicating with  
.the Branches which /lie round the Condyles'os the Os homo-  
Ids, together wi th a Ramification of the first or internal Branch.

Immediately after the Origin of these ‘ two Branches, and  
hesore the*' Poplitea* ends, it fends a small *Artery* down on the  
hack Side of the Interosseous Ligament, Very near the Tibia,  
into which it enters by a particular Holo a littie above the mid-  
dle Portion of the Bone. As the *Poplitea* ends,. it divides in-  
to two principal Branches, .One os which runs between the  
Heads of the Tibia andTshulaf passing from behind forwards  
on the Interosseous Ligament, where it takes the Name of  
*Artersa Tibialis anterior.* The second Branch divides into two  
others ; one internal : and τ larger, call'd *Arteria Tibialis poste-  
rior* ; 'the'other posterior imd smaller, named *Artocia Peroncea  
posterior...* . „-ῖ 'si "' ! ss ’

The *Tibialis anterior,* haying pass’d hetween the Heads of the  
Tibia and Fibula, sends small Branches upward and . laterally:  
ThoTuperiur Branches cominunimte with those Ramifications os  
the *Poplitea.*which lie round the Articulation ; and the lateral  
Branches go to the neighbouring Parte. Afterwards this *Tibial  
Artery* runs down, on the sore Side of the shterosiedus Liga-  
.jnent, toward the Outside os the Tibia, between the Musculus  
Tibialis Anticus and Extensor Pollicis. prism

Having run laterally on the Tibia for About two Thirds of  
the Length\*of that Bone, it passes on the sore Bide, under the  
common' annularDigament and Extensor’Pollinis, Io the Arti-  
culat ion of the Foot; giving off several Branches both to the .  
Right and Left Hand, which communicate laterally.with the  
*Tibialis posterior* and *Pcrcnaa posterior* ; so that these two Bones  
ale in a manner surrounded by *Artcries.*

At the Joint of the Foot it sends out Branches, winch ruti  
between the Astragalus and Os'. Calcis, being distributed to the  
Articulation, and to the Bones of the Tarsus, ’ The Cominii-  
nidations ale here veryurtlmerous on'all Sides;'

Having pass'd the Fold of the Foot, it sends off, toward  
both Sides, other Branches, which communicate with *tffidposte-  
rior* Τἰόίσ/ἐν and *Pcr'onaa* ; all these Branches making a kind of  
Circles round the Tarsus. Afterwards *tLC anterior Tibial Artery*advances' on the convexi Side os the Foot, as far as the Inter-  
stice, between the first" and ' second Metatarsal Bones ; between  
the Heads'of which it sends: a'large Branch, which perforates  
the superior Interosseous Muscles, and, joining'the *Tibialis  
posterior,* forms an Arch onthe Side of the Foot.

It likewise sends two’or three eonsiderableTranches over the  
other Metatarsal Bones, ...whichgo to the Test of the Interosseous  
Muscles and Integuments, and communicate with each other.  
’ Lastly, this *Artery* terminates by two principal Branches,  
one of which goes to the Thenar and Inside of the great Toe ;  
the other is spent upon the: Outside' os the .greatToe,, and the  
inside of the second ToesY τι T;ss ' ’

The *Tibialis post prior,* -call’d 'likewise *Sscralis,* funs down  
between the Soles, Tibialis posticus. Flexor Digitorum com-  
inunis,. and.. Flexor Pollicis ; .imving Branches to these, to the  
Tibia, and th the Marrowos that Bone, through a particular  
Canal in its posterior and tipper Part. ’ 1

... Afterwards it runs behind the inner Ankle,, Communicating  
with *tKC Tibialis anterior,* and surrounded by'the neighbouring  
Veins, and passes, to the Soleos the Foos, ‘between the concave  
Side of the Os Calcis, and Thenar Muscle where it divides  
Into two Branches, one Targe , hr exterhai, sthe other final! or  
interiiall' ' - \* -" ..

The great Branch, or *Arceria Plantario externa,-* passes on  
the concave Side of she Os Caldis obliquely, under the Sole of  
the Foot, to the Pasts "of the fifth’Metatarsal Bone ; and from  
thenje Tups in a kind of Arch toward the great Toe,. cominu-  
Ideating-'there with the *T.sheatir anterior'gi.* which perforates she  
InterofleonsMnscIes, in rhe Manner already said. \*

The convex Side of .this Arch supplies' herth Sides of the last  
three Toes, and the Outside ofsthe second Toe, forming small  
ootinn unica ting Arched at; she End,‘and sometimes at the Midi  
dle of. each Toe, as in the Hand. ‘ The concave Side of **the**Arch furnishes the neighbouring Parts. \ . ’

The small Branch, or *'Arteria Plantaris interna,* haying  
reach’d beyond the Middle of. the Sole of the Foot, is divided  
into two ; one os which goes Io the greatToe, communicating  
.with the Branch of *sLse.Tibidles anterior* ;" the. other is distributed  
to the first'Phalangesof she'otherToes, corninunidating with  
the Ramifications frorn' theArch already mention'd.

. The *Arteria Perodaea* runs down on 'the back Side **of the**

Fibula, hetween the Soleus and Flexor Pollicis ; towhich, and  
to the neighbouring Parts, it gives Branches in its Passage.

? Having reach'd to the lower third Part of the Fibula, It  
sends *oss.2.* considerable Branch, which rims in - between the  
Tibia and that Bone, passing between their Extremities, from  
behind, forward, below the Interosseous lagament, and is distri-  
huted to the Integuments of theTarfus. .

Lastly, the *Pcronaea* continuing its Course downward,’ on the  
back Side of the Fibula, aS far as the Os Calcis, forms an Arch  
with the Tibialis posterior, between the Astragalus and the  
Tendo Achillis, i . pri .

From thence it runs outward, and, a littie above the outer  
Ankle, communicates with *tffiz Tibialis anterior* by an Arch,  
which sends several small Ramifications to the neighbouring  
Parts.. ...... . . -. . . ' *’ -s'*

- \*. In tins Description of the *Artcries,* I have said nothing os'the  
Cutaneous Anastomoses, which are exceedingly beautiful in the  
Foetus ; nor of she frequent and considerable Communications  
os small *Arteries* upon the Periosteum, winch form a delicate  
kind of Net-work, or Rete Mirabile. .

**EXPLICATION** *stf* **TABLE***theFourih, which represents the*

*Situation of the principal Blood-vessels.*

*From* **EusTACHIUs.**

**....... . . TABLE JVc**

‘ Τ. The Heart..

2. The *external Jugular,* on the Right Side, cut off.

3. The *internal jugular* on the Left Side.

. 4. 4. The. *Subclavian Vessels* on' each Side.

5. 5. *Tspae Axillary Vessels,* arising from the *Subclavian.*

.' 6. 6. The *Cephalic Fein* on each Side.

' 7. 7. The *Vend Mediana* on each Side.

8. The *Vena Basilica* on the Right Side. ..

9. The inferior Part of *Aorta Deseendens.*

" IO. The *Vina Cava. ' '' .*

- II. The *Emulgent Viins.*

12. The *Kidneys. ' e*

'13. The *Iliac Vessels* on eachsside.

’ Ί4. The Blood-veffeis of *stcae Penis. ..*

**EXPLICATION** *of the .Fifth TABLE, representing the  
Arteries dissected sunt.*

**' ‘ ’ .FroIKDRAKK.**

**TABLE V.**

**I.** The *Aorta,* or *Arteria magna,* cut from its Origin at **the**Orifice of the Lest Ventricle of the Heart.

si. The three semilunar Valves of the *Aorta,* as they appear  
when they hinder the Blood from coming back into the Left  
Ventricle, when the Heart is in *Diastole. ' -*

2. .2. The Trunk .of the *Coronary Artcries* of the Hears, - .  
arising from, the Beginning of the *Aorta. - - - ;*

3. *Ligamentum Arteriosum,* not well express'd.-

4. 4i The *Subclavian Arteries,* arising from The *Arteria  
magna; from* which the *Axillary Antcries,* and. those of the  
Arms, (23. 23.) are continued.'

; 5. 5. The two *Carotid Arteries,* the Right arising from the  
*Subclavian,* the Lest from the *Aortas .*

6. 6. The two *Vertebral Arteries,* arising froth the *Subcla-  
vicula,* which pass thro' all the transverse. Processes os the Ter-  
*tebra* of. the Neck, from whence they are here freed.

' 7. 7. The *Arteries* which convey Blood to the lower Part  
of the Facesi Tongue, adjacent Muscles, and Glands.

8. 8. The Trunks of the *Temporal Arteries* springing from  
the *Carotide,* and giving Branches to the *Parotid Glands,*and to, . ἵ ' . - ’ *γ . .*

9. 4. The neighbouring Muscles, hairy Scalp, and Fore-  
head. . *; r:*

' To. IO.' Trunks which send Blood To the *Foramina Narium,*particularly the Glands of *Mucous Membranes\_ si- ' i' -*

**II. II.** The *Occipital Antcries,* whose Trunks pass olofe by  
the *Mammiform* Process, and are distributed on the hinder Parc  
of the hatry Scalp, where they are inosculated with the  
Branches of the *Temporal Artcries. . .*

‘ ' I2. I2. *Arteries* which carry Blood Io the *Fauces, Garga..  
reon,* and Muscles of those Parts, s’ *y".*

- Β. B. A small Portion of the *Pasts* of the Skull, that is  
perforated thy' the *Artcry* of the *Dura Muter,* here- express'd,  
.with Part of the *Dura Mat or* remaining to it. ... ’

T3. i3. The Contortions of the *Carotid Artcries,* hesore  
they pass the *Pasis* of the Skull to the Brain. .. .

. 14. I4. Those Parts of.the *.Carotid Arpccies,* where they  
pass by eache Side of the *Sella - Turcica,* where divers small  
Branches arise, from them, and help to compose the *Pete Mira\*  
bile,* which is more conspicuous in Quadrupeds than Men.

**. C.** The *Glandula Pituitaria,'* taken out of the *Sella Tur-r  
ceca,* lying between-the’ two contorted Trunks *os* the *Carotid  
Artociessate, ~ ....... :*

i. D. D. The *Artcria Ophthalmica,* which spring from the  
*Carotids* before they enter the *Pia Mater. ...*

.: r5. The Contorsions of the *Vertebral Arteries,* as they pass  
the tranverse Processes of the first *Fertiebra* of the Neck,  
towards the great *Foramen* of the *Os 'Occipitii. We* have,  
more than once, taken Notice, that the Cavities os these *Arte-  
ries,* where they are contorted, have been larger than their  
inferior Trunks ; whereby the *Impetus* of tho Blood must neces-  
sarily he Very much lessen’d, as well as by their Contorsions  
only. In Quadrupeds the Angles of three Contorsions of the  
*Artcries* of the Brain are more acute, which in them is the  
more necessary to lessen the Force of the Blood at their Extre-  
thities, by reason of the horizontal Position of their Trunks. .

I 6. The two Trunks of the *Vertebral Artcries,* that he on  
the *Medulla Oblongata.*

*.. ley.* The communicant Branches between the *Carotid* and  
*Cervices Arlcry.. . 'uri*

- IS; I 8.. The .Ramisications of *rhe Artcries* within the Skull ;  
the larger Trunks of which lie hetween the Lobes of tho Brain,  
and in its *Sulci.* From the Extremities *of these Arteries* of the  
Brain are continued its Veins, whose Trunks vary much in  
their continued Position from' *rhof Arteries,* these entering the  
Brain at its *Basis,* and distributing themselves, as above noted;  
whereas the T runks of the Veins are. extended on the Surface  
of the Brain, .and discharge their Blond into the longitudinal  
*Sinus.* Nor do the Veins of the Brain accompany *their Arte-  
ries* at their Ingress, as in other Parts, and . as the *Arteries*and Veins of *tfoe Dura Matcr* .do ; both -which pass thro’ the  
same *Foramen* in the *Basis* of the Skull, Β. B. \*

E. E. The *Arteries* of the *Cerebellum. ..*

I9. Iio. The *Arteries* os the *Larynx, Thyroid Glandules,* and  
adjacent Muscles and Parts, arising from the *Subclavian Arteries.*

20. 2O. Others arising near the'former, winch convey Blond  
to the Muscles of the Neck and *Scapula..*

2I. 2I. *ThC Mammaria,* which arise also from *ism Subcla-  
vian Artcries,* and descend on the Cartilages of the true Ribs  
internally, about half an Inch distant, on each Side the Dr  
*Pectig.ts or Sternum.* Some Branches of these pash thro\* the  
Pectoral as well as intercostal Muscles, and give Blond to the  
*Mamma,* where they meet with some Branches *of the Inter.,  
coastal Artsm.es,* with which they are inosculated." ' ’ ’

These *Mascnntary Arteries* join :wim the\* large Trunks of the  
*Epigastrici* (57. Sy.) also, by which means the *Impetus* of the  
Blood of the Integuments of the *Abdomen* is carried on with  
more Force: The Extremities'sof the *Intcrcostal* and *Lumbal  
Artcries* also inosculate with each other, as well as these. -  
- 22. *22.'Tfoe.Artcries* os the.Muscles .os the .Gr *Humcri,*and some of those of the *Scapula.. . ‘ ' si- j*

. 23. 23. Those Parts Of the large Trunks of the *Artcries* os  
the Arm, winch are liable to be wounded in opening the  
*Vina Basilica,* or innermost of the, three Meins in the bending  
*ps* the Cubit. . - - Ἀ

24. 24. .The Divisions Of the *Artcries* of the Arm, below  
the Flexure of the Cubit.

24. 25.- A communicant Branch of an *Artcry,* arising from  
the Trunk of the *Artery* of the Arm, above its. Flexure at the  
-Cubit, which is inosculated with, the *Arteries* of the Cnbit  
below. In Tome Subjects you will not find this communicant  
Branch, as here represented, in whom there are divers smaller  
Branches of the same Kind. By these communicant Branches  
of the upper Part of the *Brachial. Antcry* with those of the  
Cubit, the Blood still passes, tho' the Trunk (23.) is firmly  
tyed ;. which is done in taking up the *Artery,* as it is call'd,  
when 'tis wounded in the Case of an *Aneurysm:* Besides firmly  
tying the Trunk. os the *Artcry* above the Place where it is  
wounded, it is also necessary to tye it in like manner helow,  
lest the Blood, Convey'd by the communicant Branches to the  
inferior Trunk, still pours out at the Wound of the *Artery*from below, in a retrograde manner. "

... 26. *ThC .external Artcry* of the Cubit, which makes the  
Pulse near the *Carpus.*

less. 27. The *Arteries* of the Hands and Fingers.

28. 28. The descending Trunk of the *Arteria magna.'*

*. .yiurisePSa Artcria Bronchialis,* springing from one of the  
*Intcrcostal Arteries:* It sometimes arises immediately'from the  
descending Trunin os *gisae Aorta* ; at other times from *srti supe-  
rior Intcrcostal Artcry,* which springs from the *Subclavian.*These *Bronchial Arteries'* inosculate with the *Pulmonary Arties,  
pies. . Vid.stuyseh. Epist. Anatom.* 6 Fig. c. ci c. ‘ .

3o. A small *Artcry,* springing from the fore Part of the  
*Aorta Descendens,* passing, .to the *Gula. Ruyseh* telis tis of  
Branches of *Artcries isuas tlensieperior Intcrcostal,* which'go to  
the *Guls.*

. 3I. 3I. The *Intercostal Arteries* on each Side the *Artcrla  
inagna Descendens.*

. N. B. *The Representations of the Arteries in this Plate, front*Fig. 32. to Fig. *testes are det as they usually appear sin Subjects.  
'The References also, de not agree with the Figures; and the Whole,  
in this Place, is much confused.*

**32. The Titkof the *Artcria Cacliaca,* from whence  
spring,**

33' 33. 33. The *Hepatic Art cries,* and,

34. The *Artcria Cystica,* on the Gall-bladder;

35. *Artcria Cormaria Ventriculi iniferior.*

36. The *Pylorica.*

*psp.* The *Epiploica Dextra, Sinistra,* and *Media,* springing  
from the *Coronaria. δ᾽*

38. The Ramifications of the *Coronary Artery,* which em-  
brace the Bottom of the Stomach. ’ '

39. *Coronaria Ventriculi superior.^*

40. 4o. The *Phrenic Arteries,* or the two *Artcries* of the  
Diaphragm; that of the Left Side arising from the Trunk of  
the *Artcria magsia* ; the Right springing from the *Caeliaca.*

4I. The Trunk of the *Splenic Artery,* arising from the *Coe-  
liaca,* contorted.

' 42. Two small *Arteries,* going to the upper Part of the *Duo.,  
denum* and *Pancreas* ; the rest of the *Arteries* of the *Pancreas*spring from the *Splenic Artery* in its Passage to the Spleen.

. 43. The Trunk Of the *Artcria Mes.entcrica supcrior,*turn'd towards the Right Side.

44.. 44. The Branches of the *superior Mesenteric Artcry,  
fiord* from the small Guts. Here the Various *Anastomoses* the  
Branches of this *Artcry* make in .the *Mesentcry* before they  
airiveat the Intestines, may he observed.

. 45. The *inferior Mesenteric Artery,* arising from *ffic Artcria  
magna. ...*

46. 46. 46.. Remarkable *Anastomoses* of the *Mefentcric Ar-  
tery* with the *Supcrior.*

47. 4y. The Branches of the *iniferior Mesenteric Artcry, as*they pass To the *Intestinum Colon.*

48. Those of the *Rectum.*

49. 49. *'TsaeDrnulgent Arteries* Of the Kidneys.

. 5O. The *Vertebral Artcries* of the Loins. '  
. 5I. 51. The *Spermatic Arteries,* which descend to the  
*Testes,* and are so small as m escape heing fill'd with Wax.

52. *Artcria Sacra.' .*

. 53. 53\* *Arcerlae Ilidca.*

.. 54.'54. *Fesni Lliaci externis.*

55. 55\* *Dtdci ifiterni,* which are larger in the *Eaetus,* pro-  
portionably, .than in the Ad alt, by reason of their Conjunction  
with the two *Umbilical Arteries.'*

56. 56. The two *Umbilical Arteries* out off; that of the  
Right Side being drawn as in the *Faetus*; the Left is express'd  
as in ah Adult. \

57» 57. The *Epigastric Arteries,* which ascend under the  
RinhtiMuscleS of the *Abdomen,* and are inosculated with the  
*Mammaries,* aS above noted. . Ἄ i

’ 58. 58. Branches of the *external Iliac Arteries,* passing  
hetween the two oblique Muscles os the *Abdomen.*

59. 59\* Branches of the *internal Iliac Artcries,* which con-

vey Blood to the *Extensores* and *Qbturatores* Muscles of the  
Thighs. '

.60. 6o. The Trunks of the *Artcries,* which pass to **the***Penis.*

‘ 6I. 6 I. The *Artcries* of the Bladder of Urine.

'62. 62. The *internal Arteries* "of the *Pudendum,* which,  
with those here express'd of the *Penis,* make the *Hypogastric Ar-  
teries* in Women. The *internal Arteries* Of the *Pudendum*arise from: the upper Part of the *Crural Artery,* which is im-  
mediately below the Epigastrica.... . . . .

64. The *Pants,* distended with Wind, and dry'd. - -:su

64. The *Glans Penis.*

65 . The upper Part or *Dorsum Penis,* Cut from the Body  
of **the** *Penas,* and raffed to shew the *Corpora Cavernosa  
Penis.. . '.*

y 66. 66. Corpora *Cavernosa Penis,* freed from the *OJsu  
Pubis,* and tyed after Inflation.. .. . . 1

τ by. The two *Arteries* os the *Penis,* as they appear injected  
with Wax, in each cavernous Body of the *Penis. - '*' 68. The *Capsula* and *Septum* of the *Corpora' Cavernosa  
Penin : - -*

. 69. The *Crural Arteries. .'*

\* .70. 7Ός The *Artcries* which pass fo the Muscles of the  
Thighaand YIihe; . - . . . -

7 I. That Part of the *Crural Ars.cry* that pastes the Haim  
72. The three large Trunks of the *Artcries* os the Leg.

. .73. The *Arteries* of the Foot, with their communicating  
Branch, from their superior ito their inferior Trunk, .as well  
as their Communications at the Extremity *of* each Toe, like  
those os the Fingers. *Drabds Anatomy. \**

6 ARTERIACA, ά^εριακάί are Medicines against the Did  
orders Of the Voice and *Afpera Actorias,* whence they take theis  
Name. *Blaneard. . . δ᾽ -' . '*

ARTERIOTOMIAj Arteriotofny. The opening of an  
Artery with a View, os taking away Blood. ' ’ '  
'- This: Operation was much practised by the Antients, and *is*now actually much in Dse in some foreign Nations, however  
-rate ίή *EurCAcgi. Oribasius* Rives' an Account of it .'from *Galen*

and *Antistius : Paulus AEgineta* speaks os it atfll: thing icom-  
monly practised ; and *Prosper Alpinus* telis us, it in frequently:  
performed in *EgypL.* It is. from these..Authors, and *Horsier,* I -  
shall give the Particulars of Arterintomy./ss [ -. ....  
., Physicians, cut the *Temporal Antcries* for a Defluxion of hot,  
and flatulent Humours into .the Eyes, and the *Arteries* hehind.  
the Ears of.Persons subject to a Vertigo, especially if they have  
been inng afflicted with Disorders in the Head, proceeding from.  
Heat and Wind, or any other chronic Distemperature of that.

- Part. ... .. '3. sc.”

When any other Placeis affected, they do. not. cut. the. *Acter :  
Ties,* though there are many Parts which, require, to he relieved.,  
this way, rather than by opening a Vein 7 for where-eVer a DJise i  
order arises from a Collection os hot and flatulent. Blood **in-the.***Arteriis,* the affected Part requires *Arteriotomy.* But since jt.is..  
difficult to stop the Flux Of Blond, and when the Wound, is.  
brought to cicatrize, there commences an *Aneuryfm* ; for these.  
Reasons, Physicians have heerr cautious of opening the larger:  
*Arteriosi* and as for the..smaller, .they forbear them, aschinkr  
jng them os little Service: However, the Gutting of a small *Ar.r.  
tery* has 'been known to. do much Good, and .the; Wound has,  
been cicatrized without an *Aneuryfm -,* and eyeitis one os. the  
larger *Artcries* be opened,, a Cicatrix .may. be. induced on Its  
without an *Aneuryfm,* that is, by means of cutting it quite,  
through, the doing os which has often delivered the Patient!  
from the Danger of an Haemorrhage. Fot.it plainly appears,  
that when the *Artery* bya cross Section is divided in two, both  
Parts being retracted, one retires upwards, andthe other down-.-  
wards. For my own part, having received some clear.Admo-:  
nitions in my Dreams, I cut the *artery* which lies hetween the  
Thumb and Fore-finger of my Right Hand, and suffered the  
Blood to flow till it ceased of itself; for so I was ordered in  
my Dreams ; but the Quantity was less than a Pound. By this  
means an inveterate Pain, which principally, affected that Part  
where the Liver joins to the Diaphragm, went off on a sudden.:  
Another, by a Wound in his Ancle, had an *Artery* cut, which  
ceased not to bleed, till I was sent for ; when Lcame, I died  
Vided *ffiz Artery* in two, aster which I applied aRemedy, which  
consisted of Aloes, Frankincense, and WhitesjofEggs, spread  
Upon .the soft Fur of Hares; and the Wound was cicatrized:  
without an *Aneuryfm,* the Orifice of the *Artery* being in earn’d;!  
and the Patient, who for four Years past had felt a Pain in his  
Hip,-with Very short Intervals,, was perfectly chred from that  
Time. This Success has often induced: me to use *Artersotomst*in the Joints of the upper Extremities, and ini the Head rtfelf,  
for all Pains proceeding from a hot and-flatulent.Matter ;:hut  
especially when a Membrane is affected with.a sort of pricking  
Pain, which extends itself by Degrees in such.a manner, that  
the pungent Sensation seems, aS it were, fixed in the Centre  
of the Pisce affected, while all the circumjacent Parts labour  
Under a Tension. *Oribasius, Mad. Collects Nib. J. Cap.* I-3.  
from *Galen.* so. : v : .. v : a

r We cut the Artery that lies sunder the Top os the Head tor.  
wards the hinder Part, among the Tendons ; or we open the  
*Artcry* behind -the Ears, or-those which lie on each Sine os .the  
*Vertex* towards theforePart of the Head, sorthey belong ro the  
coronal and middle Sutures. These *Arteries* which.reach from  
**the** Temples to the Forehead, are not cut, because they are  
situated against a Muscle ; -but they may he safely opened, -if  
the Patient, in Compliance -with Directions, move his Cheeks  
forcibly, by which meansall the Muscles of the Temples,through-  
out their whole Extent, are Visibly put:in Motion. We have  
an Opportunity then of letting alone the Part in the Forehead  
that moves, and making the Section in the Part that .is at Rest.

‘ However, the .Blood does -not-stow very-fast, nor in any great  
Quantity, from these *Arteries,* because of.their Smallness; nor

. does it' issue forth with much Spirit, -because .they approach, the  
Nature of Veins. The *Artcries* hesore the Ears, where the  
Muscles of the Jaws arise, are very firm and strong; .but are  
seldom cut without Danger, because of the .Nearness of the  
Muscles, and the Foldings os-the Membranes of-that Place.

In the *Arteriotomy* on the Occiput, .the *Artery su.res* becut.home  
to therBone, which is to he. scraped,. that Flesh .Inay .repullulate  
Upon it for the Reception Qf-the Mouths ofcheyfncery.TIn  
cutting-the *Artery,* the best way is Io treat.it.like a Varix, .by  
taking it up -with the Forceps, or some such Instruments,. and  
making .not a gruat Incisiori,-but -severaLfinallones. When  
you have drawn off a sufficient Quantity of Blood, theiVeffel  
as to he: taken up with the Forceps, and-quiseoivrded ; sexi by  
-this means it will never be Joined again, nor will-there; he-any  
Danger of an Haemorrhage, the Mouths of the *Arteries* .being  
drawn backinto the Flesh. *Cribasius, 'Mad.-Coll.Lib. J ..Cap.  
'lAnseOitlAntyllus.* ’ ' -μςςς'-ἀ’ .uro

- For Defluxions in the Eyes of Jong Standing, -and -vertiginous  
'Affections, we use to cut- the *Arteries* behind the Ears. - In .order  
Io this Operation, the hinder Tart -foe. theHead is first th be  
inaved, and then fait with the .Fingers; sor-by-thePulsein  
that Place, we very-easily discover the: Situation of-the *Art cry.***We** then cut home to -the Bone, making; an Incision Cf-two  
Pingers Breadth in Length, ihe Place being hesore marked with

Ink.’ Ifwe tniss' the *Actery,* we are to take the Distance os  
three .Fingers Breadth frontthe Ears,' arid perform the Opera-  
tion, cutting the *Arteries* across; till we perceive the Blood to  
flow with "a Pulsation, and our.-Instrument.touches the Bones  
After taking, away. *a* moderate Quantity of Blood, we divide,  
the. Periuranium, that, it; might riot he distended, and' so in-,  
stained; and having scraped the Bone, thrust a Linen Tent into  
the Wound, and heal it.with Dressings of Lint. Tf the Bone  
in that Place stilsuemains bare, we repeat the scraping IE *P.  
AEginct. Lib. 6. Cap.* 4. . .. .t .. ’

*Arteriotomy,* or thoopening *Arteries* in inrder.to procure an  
Evacuation of Blood, was among *sm. Egyptians* an Operation  
as. common, and undertaken - with aS little Dread, asVene-  
section, itself.; Thin Practice, they mot -only used on many Oc-  
cations, but.looked upon it aS a.divine Secret, .andthe safest  
and most infellibleMeans os Recovery in long-standing and in-  
veterate' Inflammations of the Eyes; 'as also for long-protracted  
Head-achs, and obstinate. Pains:os the Viscera. . .- ...

Some Physicians in After-ages declared themselves Enemies  
to. this Practice, and supported their Judgment by a Passage of  
*Galen,* whojuin *Lib. de Curat, pcr Sang. Myesse\* has these  
Words ; " I have known some the in Consequence os the in-  
‘S terior *Artery,* of. the Cubit lying under the Vein being open-  
so ed. In some I have found GrangreneS immediately Tro-  
" educed by the Application os Bandage, with a View in stop  
\*i the Haemorrhage, and I have known others expire under  
the Operation forithe Aneurylim’j They imagined, that an  
opened. Artery could not he .agglutinated, and that the Danger,  
of an Aneurysm, at least, arid even os Death itself, must os  
Consequence be the Result of *Arteriotomy.* But these Phyfi-  
cianS seem to have forgot the Reasoning of *Galen* their great  
Master, in the sixth Chapter os the fifth Boole of his *Methorlus  
Madendi,* where he uses theseWordS: " Some, says he, assert that  
"..one *os* the Coats .of an *Artery* is hard and cartilaginous; and  
" a Substance of that Nature cannot possibly coalesce and ag-  
" glutinate, since a Disposition to join and unrye ts only found  
" in soft Bedies.. Asin external .Objects we do\* Itos find, that a  
*" Store,* sor Instance, unites wish he Neighheur *SI one,* nor a  
*" Shell* with *A Shell ,* so neither with oursel ves do *Cartilages*" unite with *Cartilages,* nor *jseapy* with *stones r set* broken  
" Pones do not cohere by- *Union,* .hut are Joined' by a glutinous  
*" Callus,* winch: the\* *lumr.cebs* . call\*:*rtistgs.* It .roust he"owned,  
" that such is the Nature. of an *Amcry scsto* render theAgglu-  
" tination of' its.hard Coat dissieult; bur yet this Difficulty in  
" not altogether unsusmountable, since an *strlory* Js neither so  
" dry norfo hard as a Bone os Cartilage, hut much softer, and  
" of a more fleshy Nature. \And we have the less Reason to  
Wdespair of. agglutinating the Orifice os an Sherry; since the

*Artery* Itself is small, and the. Body of a Mao os a soft and  
" yielding Nature. Experience, herself seems in this Case to  
" Join her friendly Voice to Reason, .since ip Children and Wo-  
" men, who have moist and Tost Bodies, I .have seen the *Arteries*" agglutinated ;- and especially In one Youth, who had one  
" Of his *Arteries* Sightly cut. But Atough an Orifice in an  
*" Artery* is more difficultly agglutinated, than that in a Vein,  
" yet the Medicines used in both Cases are pot Very different,  
V hut plainly of the .same Species, .and only Vary in Degree;

sor an *Artery* requires Medicines somewhat drier than a Vein;  
" but if the Intention is to produce Flesh around the Orifice,  
" the Medicines .to he used are the same in both Cases. " Two  
things.concur .to render the Agglutination of *Arteries,* and the  
Cure of Ulcers formed in them, difficult; for,.as Gance justly ob-  
serves, .thatUlcers .in the LUngs cannot he cored by reason os  
their continual Motion; so the Morion and Pulsatinn of the  
*Arteries* is a great.Obstruction To the Agglutination ofAVounds  
made in .them. The Difficulty os Agglutination he *also* aug-  
mented thy theHar.dness of .thatJSubstance of which, the *Artery*Consists. The Pulsation of the *Art cry* in moshessicaciotifiy pre-  
vented by the Application of 4 ’smooth, ..round aril shiek:Platd  
of. Brass, afterthaving duly united the Qrifiee. . ... 2. .

.'The *Egyptiansspsesi* ito. open ail' the *Arteries* discoverable in  
the-Head.; -for jn Head-achs of ajong standing, .especially.such  
as are attended^withPulsafion, and in all .inflimiiiations.*sei* the  
Head,.they'insed Io .cht-theEIIherher, .and.those.plheedherhtnd  
rhe Ears ;.in opening .all .of. which .they *were* successful.; but  
they most hemmonly-opened, that Jo theTorehead, .eipeciallythl  
.case.of.old?Inflammations of.theSyeS; and' I;my.sels, when  
*in.Grand Coairo, foes* mahyTuied, -ashy; a; Charm,- of old Head-  
achs, asalohstiheiednfiaInmatiops,oEhe Eyes,-byopening tine  
MkeeTy.instheForEhead, and making a -sudden; Evacuation *of*-Blood. \*: ThisPractice was .known to *Galen,* ass is plain from  
.these AVordsin thesourttioothfeook os his *MetholsusMydendi:*

The Dead, stays -the, Inustche shaved, and those*' Artcrses*'5ς whichsare situated .near..thmiEars, and those;hehind .theina  
t." those also jri. the. Forehead and-Temples, are to . he carefully  
."ifelth And thoseosthem .which are felt warmer, .and^whoie  
1 cf.cd Pulsation ^.stronger than that of'the others, dare. tR.be Onr\*

"But os .those iwhich are small, and lie. near she Skin, st Js  
" proper to cut out a Part; as we usedIo.d.o.im-ft?Gnce Ps the  
" Legs.". This Practice is Very-frequent among. *ism.ENptlaris,*

- The first Step 'then to he taken is, to place the Patient in a -  
Chair or Bed, and make him recline his Head from that Side  
on which the *Artery* to he opened lies. Then the Surgeon is  
carefully to explore and find out the *Artery,* in winch the In-  
cision is to be made ; the most proper Method of doing which,  
is by applying his Left Hand to the Temple in which it lies;.  
Then having discovered the *Artery* by its Pulsations, and duly  
observed its Situation, he is to fix and secure it by his two first  
Fingers, which must yet he removed at such a Distance from  
each other, that a Lancet may he commodioufly passed between..  
them into the Cavity of the *Artcry.* But the Lancet must, for  
the most part, he passed deeper in this Operation than in Vene-..  
section, and carried transverfly upwards in its Retraction, to  
the end the *Antcry* may be the more infallibly reached ; nor is ν  
there any Danger, though the whole *Artery* should he cut asun-.  
der. As soon therefore aS the Incision is made, if a ruddy and .  
florid Blood, whose Stream, as it were, beats Time to the  
several Pulsations of the *Arteries,* bursts from the Orifice, we.  
are sure the *Artcry* is opened, and the Operation well, per-  
formed. But if it should happen otherwise, the Lancet is a.  
second time to be passed deeper, till by the sorementioned Signs  
we discover, that the *Artery* is either opened, or cut asunder. '  
But as the Point of an ordinary Lancet is flender, and may on.  
this Occasion be easily broken on the Bones of the Head, I have  
learned from Experience, that this *Artery,* especially if the In-  
cssion is made downwards, and not upwards, may more commo-;  
dioufly he laid open by a strait Incision-knife, represented by  
the Letter G, in *Tab.* 22. But .that the Operation may pro-  
duce the more, happy Effects, a large Quantity of Blood, that  
is, a Pound, or, if a Plethora call sor it, a Pound and an half,.;  
may he allowed to stow from the *Artery,* otherwise itS having’  
been opened proves of littie Service; so that we need not he  
surprised at the antient Physicians, whose Practice was to allow,  
the Blood to flow till such time as- the Patient began to saint  
away. If an *Artcry* is to be opened behind the Ear, in the  
back Part of the Head, or in any other Part of the Body, this,  
same Method is to he followed, -so far as the different Situations:  
*os Parts, and* other Circumstances, will admit of it. - ,

When as much Blood is taken from the Patient as the Phy-,  
sician shall judge proper. Bandage must he forthwith applied ,  
for which Purpose three square Compresses of different Sizes  
must be provided. The least of these.must he applied imme-  
diately to the Orifice,.the intermediate one over it, and the  
largest over both: Nor on. this Occasion, is it improper to fold-up a Piece of Money, or a small Piece of Lead, in the under-i  
most or intermediate Compress, or . to .apply a Piece of chewed.  
Paper to the Orifice itself, using the Compress at the same time,  
over it; for thus the Blood will not., only he the more easily,  
stopped, but the opened *Artery* the more effectually preserved  
from bursting out afresh.. And. that all these may he the more .  
securely fixed, upon the Wound, the knotted Bandage, (See  
FASCIA NODosA) or some other proper Bandage, must be  
applied pretty . tight, and kept so. for about eight .Days, ' that  
*an Haemorrhage* or *Aneurys.m* may he the more effectually guard-7  
ed.against, .ind is it should happen to he relaxed. It is again  
carefully to he rendered tight, and so kept, is possible, till the  
Wound is entirely .agglutinated.. h.. " ..

As *for* the Uses of *Arteriotomy,* they are by some Physicians  
extolled as so numerous, and os a Nature so uncommon, that  
the most obstinate Diseases of the . Head and. Eyes, provided  
they owe their Origin to too great a Quantity of Blood, must  
receive remarkable Relief from this Operation, eVen aster they,  
have resisted, the; Force of all other Medicines. It is also a  
common Observation, that *Arteriotomy* is generally highly bene-  
ficial in Vertigos, obstinate Head-achs, Epilepsies, Suffusions,  
and inflammations of the Eyes, proceeding from too great a  
.Quantity of Blond. And *Catherwood,* a late *Englisu* Writer,  
has in a Book, intituled, *A new Method of curing sihe Apoplexy,*endeavoured to shew, that *ihc Morbus Attonitus,* or *Apoplexy,*may he Very speedily removed by it; but I must on this Occa-  
sion take Notice, that I myself performed the Operation of  
*Arteriotomy* upon two *Apoplectic* Patients, one os whom was  
young, and the other old ; but they both soon aster died, not-  
.withstanding .the Operation was performed in the Very Begin-  
rung os. the Disease,, and other proper Remedies were used ; so  
that *Arteriotomy* is not always effectual in Apoplexies. Since  
*Airtociotorny* then is observed in many Cases to he attended with  
.Advantages, superior to those os Venesection, and *since* she  
whole Danger Os it may be prevented, by proper Compress and  
Bandage, we may hence he enabled to make a due Estimate-os  
"the Opinion *of* those who not only pronounce it dangerous,  
. but also place rturpona Level with Venesection in poim os Effi-  
cacy. Notwithstanding whet has been said, *1* must nevertheless  
own, that: those Physicians most effectually consult both the  
-Welfare os the Patients, and their own Reputation, who in Dis-  
\_eases, where Lise is not immediately threatened, never have re-  
. Course *to Arteriotomy,* till they heve sound all other Remedies inef-  
fectual. But, that the Effects to be expected from this Opera-  
tion may he the more speedfly and sensibly produced, it. seems  
. necestary, at the same, times Io inj im a proper. Regimen, and

and that very deservedly; fince the *Ant cries* which' appear large  
and warm, contain much het Blood mixed with πkind of flatu-  
lent Matter. s

" Among the several *Arteries* of the Head, the *Temporal is*" sometimes burned; and this is done with a View to inter-  
" cept and cut off these subtile Destuxions, which sail down up-  
“ on the eyes : And the two *Arteries* behind the Ears are  
α opened for certain Species of Opthalmies, watry Humours,  
*" Nyctalops,* and old Pains of the Liver ; but there is always  
" sonte Danger in opening them, and they require a long Time  
" to consolidate?’

I never indeed saw the *Egyptian* Physicians cut an *Artery cnsite.*thro', or contract any Part os it; but I heve often seen them open  
*Arteries* just as we do V eins. They often burn the *Temporal Arte-  
ries* in order to prevent Fluxions on the Eyes; for which Rea-  
son you may observe many People in all Parts of *Egypt* with.  
their Temples burned. This Practice of burning the *Temporal*and other *Arteries,* they first-had from *Ethiopia*; for many of-  
the *Ethiopians* and *Abyssfinians* use this Method of burning. -1  
never saw; that any of them used this Operation on the *Anterior*behind the Ears for Disorders of the Eyes, and Pains of the  
Liver; sor when the Liver is affected, they used to open the  
*Artery* hetween the Thumb and Fore-finger, which Practice is:also approved of by *Galen,* in his Book De *Curat, pcr Sang.'  
Messe.* 'These Physicians also told me, that -they opened the  
*Jugular Art cries* in Patients who were in Danger os Suffoca-'  
tion, but I never had an Opportunity of seeing that Operation  
performed. They open the *-Artcry* between the Thumb and  
sore Finger, for Pains and Inflammations of the Viscera. The  
Method of opening an *Artcry* among the *Egyptians* was this j  
The Operator first of all applies a Linen Ligature to the Part  
in which the *Artery* is to he opened, justas in Venesection;  
and suffers the *Artery* to heeome turgid, and full of Blood ; then,  
he makes an oblique Incision with a Very sharp Lancet or In-  
cision-knise; but in performing this Operation, the Incision  
ought always to be made very little, because the Blond eon.. 1  
rained in the *Aruries* is Very thin, and because a large Orifice'  
agglutinates with more Difficulty than a small one. Having  
thus opened the *Artcry,* he takes away as much Blond as he'  
judges necessary: But the Rule observed by most, with regard  
to the Quantity of Blond to he taken, is to let it stow fill It  
stops of its own Accord. When a sufficient Quantity is taken  
away; they bring the divided Lips of the *Antcry* into Contact  
with their Fingers, just as we use to do these of Veins; then  
they apply a little Cotton to the Orifice of *gicae. Artery,* oyer  
which -they lay a large Brass Coin, called hy them *Follara,*which they tye upon the wounded *Artery* for three Days;.at the  
End-of winch Time they take away the Ligature and Coin,'  
using fro other Step in the Cure; and all the times! saw this  
Operation-performed, I observed the Patients-rendered entirely  
found by the foregoing Method. Others, before tying the *Ar-  
tcry,* and applying the Cotton to it, use a littie Frankincense'  
, made warm in the Flame of a Candle, with which they unite  
the Lips of the Orifice ; then they apply the Cotton, and, last  
of all, the *Follara.* Two things then, in the *Egyptians* Method  
of performing this ’Operation,"deserVe to be duly reflected up-  
on : First, that they made the incision Very small, oblique,-  
and with a very sharp Instrument. Secondly, the Application  
of the Brass Coin, by means os the Coldness and Hardness of  
which the Pulsation of the *Artcry* was so sar destroy'd, as to  
allow the Agglutination and Cure of the incision made in the  
*'.Artcry. . Prosper. Alpini Medicina AEgyptiorum: . .*

- The Word *Arteriotomy,* according to its Etymology, signi-  
fies that Chirurgical Operation, by winch, for the Safety of  
the Patient, The *Artcries* are opened almost in.the same manner  
with the Veins, in order to procure a Discharge os Blond. But  
though in our own Days this Operation is not so frequently at-,  
tempted as in former Ages, sor sear not only of too great an  
Effusion of Blond, but also of an *Aneurys.m*; yet if it is can-  
tioufly performed, it has the Suffrage of the greatest Physicians  
in its Favour, as heing a Practice of singular. Use, and unat-  
tended with any bad Consequences. - Accordingly we read of  
the more antient Physicians opening *Arteries* in Various Parts of  
the Body; in the Forehead, for Instance, in the Temples, he-  
hind the Ears, in the hinder Part of the Head, hetween the  
Thumb and the fore Finger,'and in every Other Part of the  
Body whererhe Pulsation was felt by the Touch. The modern  
Physicians, on the other hand, scarce open any other'*Artery* than  
thet situated in the Temples; for it is generally Anast easily  
opened, hecaufe it is sufficiently exposed to .theTouch ;..and  
Its Aperture is attended with the least Danger; either of an Ef-  
fusion of Blood, or *an Aneurys.m,* because, it lies on the *Os  
Frontis,* and may therefore be easily compressed. . No one in  
this Senses will, however,- deny-that 'tis,. *for* the most part, sar  
more difficult to open *Artcries chan Peins sc* fince the former are  
' not exposed to our Sight, het must he discovered by the Im-  
pressions made on the Touch by their Pulsations. But notio  
spend Time in describing the now obsolete Methods of *Aricri-  
- atomy* practised by the Antients, .1- come, to give an Account Of  
' that used, by some Of the later and more .modem Surgeons. .

other Medicines, that have a. Tendency to remoye the Disorder  
tinder which the Patient labours, and for. which the Opera-  
tion was performed. *Hoist ere,. Institutiones Chirurgica..*

ARTETISCIUS, ARTETISCOS. One who suffers the  
Loss of any Member. *Rulandus.*

ARTHANITA. A Plant of which *Dale* mentions two  
Sorts. The first is the. .

*Arihanita Cyclamen,* Offic. *Cyclamen,* .Schrod. Lib.„4.  
p. 59\* *Cyclamen orbiculato folio.* Ger. 694. Emac; 843. Cy-  
*clamen orbiculato folio inferne purpurascente,* C. B. Pin. Touch.  
Irish I54. Elem. Bot. I58. Boerh. Ind. A. 2. -I50. Hist.  
Oxon. 3. 552. *Cyclamen vulgare, folio rotundo.* Park. Parad.  
I98. *Cyclaminusjfelio rotundiore vulgatior,* J. B. 2. 55I. Rail  
Hist.. 2. I205.- *Cyclamen, Pants Porcinus,* Chain 5 IO. SOW-  
BREAD. ...

The Root *os* Sowbread is round, and somewhat.flattish,  
like a small Turnep, of a dark-brown Colour on the Outside;  
with several dark Fibres shooting from the Bottom. The  
Leaves grow on thick, reddish Stalks, os a darkish Green  
above, frequently marked with .white Spots, and underneath  
of. a reddish or purplish Colour,, in Shape like the Leaves of  
*As.arabacca,* round, and hollow'd in next the Stalk. Among  
these arise the Flowers, each on its own Foot-stalk, which  
is usually flenderest next the Ground. They are made up of  
one fingle pendulous Leaf, divined into five sharp-pointed  
Segments, which turn themselves backward when they open,  
and are of a pale purple or. bloom Colour: When these are sal-  
len, the Stalk .with the Seed-vessel costs itself round towards the  
Earth like a little Snake; Sowbread is planted with us only in  
Gardens, its native Place being the *Alps,* and the Mountains of  
*Austria* and *Styria.* It .flowers in. *September* and *October.*

The Root of Sowbread is Very forcing,. and principally used  
to bring away the Birth and the Secundines,: and to provoke the  
Menses. The Juice is commended by some against Vertiginous  
Disorders of the Head, used, in Form os, any Errhine. It is os  
Service also against cutaneous Eruptions. *Millen's Bot. Off:*

*. Dale* says it should he used with Caution internally. -

The second is.the

*Cyclamen Arshanita,* Ossie. *Cyclamen hedera folio.* Gers  
694. Emac. 843t Ran Hist. 2. I2O6. C.B. 3o8. Tourn. Insta.:  
155. Boerh. Ind. A; 2. I5I. Hist. Oxon. 3. 552.; *Cyclamen  
folio hedera. Autumnale,* Park. Parad. 296. COMMON  
SOWBREAD. si

This Species agrees in Virtues with the preceding; and is the  
sort which is kept in our Shops. *Dale,* j :

. ARTHETICA, or ARTHRETICA, is the Herb Ground-  
pine, so called from ἄρθρον, a Joints It cures Affections of the  
Joints.. *Blancard.*

ARTHOICUM is a red Oil extracted from the Roots of  
Herbs together with Bread artfullyoigested in Dung. - *Rulandi  
fohnson.*

- It should rather be written ART OICUM,. as *Castellus* observes,  
hecaufe derived from *dsu&, Breads Rulandus* calis it also *Pan-  
nonium.* t ’ . : .... - ἱ .it ;' , . .. ;

- ARTHREMBOLUS, ἀρθρέμβολος, from ἄρθρον, a Joint,  
and ἐμβάλλω, to impel. Or force in. An Instrument; by means  
of which the. luxated Bone of a Joint is restored to its natural  
Place and Situation. *' Castellus* from *Sponius... . ‘ '*. ARTHRITICA, ὰρθριτικἡ, is the same aS

- ARTHRITIS, the Gout, from ἄρθρον, a .Joint;\_as if we  
shouldssaytbe Disease of the Joints, or Joint-evil.

- . So much has heen said on this Distemper by Authors of almost  
all Ages; and so many trifling Theories have heen erected with  
respect to .the Gout, that it .would take up a great Numher of  
. Volumes to give. only , an Extract of what has been said on this  
copious Subject. Much of this I shall therefore pass over ; and  
the-Reader will sustain but littie Loss by this Omission, because  
Success in Practice, the onlyjthing which can render a Theory  
valuable, has not yet confinmed the Speculations of any Author ;  
insomuch that the Distemper has remained incurable, notwith-  
standing all the Visions of Theorists, and Boasts of Empirics,  
. The Method I shall take In this Article will be to give, first,  
the Sentiments of . two Authors only amongst the Antients,  
which are *Aretaus,* and *Caelius Aurelianus. . . -*

. Secondly, the History of the Distemper from *Sydenham.*

Thirdly, the History of the *Anomalous,* or Irregular Gout,  
-with the Meshed of Cure, from *Mufgrave.*

l And lastly, I shall take the Liberty of making some Remarks  
**relating to. this** obstinate Distemper.

*. From* **ARET AEUS.**

The Pain which affects, all the Joints in common is an *Ar..  
- thritis* ; if it be seated in the Peet, it is called *Podagra* ; if in  
the Hips, it is a *Sciatica*A if in the Hands, a *Chiragra:* And  
. thus it is, whether the Pain immediately attacks the Patient  
- from some sudden Cause ; or the Matter os the Disease, Which

had for a long time lain dormant; is, .upon some flight Occasion,  
.kindled into a Fit. If the Disease becomes universal, .it affects  
the-.whole nervous System.. The Pain, first seines the Nerves,  
the Ligaments Of the Joints, and all those Parts which arise  
' from and terminate .in the Bones. . And here it.jo Matter, of  
great Admiration, that the Bones, which are. utterly insensible  
to a Cut, or a Bruise, should, under .this Distemper acquire so  
exquisite a Sensation of Fain, as no. Blows from an Iron Bar,  
no Compression with Cords, .no Wounds with a. Sword, nor  
Burnings with Fine, are capable of producing, but are rather  
wish'd sor and chosen aS Alleviations and Remedies ofgreater  
Pains. Nay, .if the affected Bones were even to be amputated,  
the Pain endur'd under theSection would bediminished, aS a small  
thing is by Comparison with a greater; or, is it should happen  
to prevail, rhe Patient.would by that means receive.a Pleasure, „  
from the Oblivion of his former Pain. ..Such then are the Miss,  
fortunes which are incident to the Teeth, as well aS the Bones..

The true and undoubted Cause hereof is only known to the.  
Gods, but Men may he allow'd to assign a probable Reason for .  
it,. which I shall do in short aS follows. Bodies of. a Very dense  
Substance are insensible to the Touch and Wounds, and there-  
fore can feel no Pain from such Impressions : For Pain is a Sen-  
sation of Asperities ; but a dense Substance is not subject to he  
exasperated, and therefore is unsusceptible os Pain : On the con-  
trary, whatever is of a rare Contexture, is quick os Sensation, and .  
exasperated with a Wound. But since dense Substances are also  
animated by their native Neat, they exercise Sensation by the same  
Heat. Tito' there be a substantial efficient Cause then osaWound, .  
as a Sword, or a Stone, the Substance of the suffering Body  
receives no painful Sensation, because os its natural Denseness.  
But if the native Heat he alter'd from its just Temperament,  
the Sensation is perverted, and the Heat of such Substances, be-  
ing excited by an internal Impulse os the sensitive Faculty, he-  
gets its own Pain ; but Pains proceed from an Increase or Lu- .  
xuriancy of Nature,

The *Arthritis* makes its Attacks after different Manners, ac-  
cording to the Nature of the Joint. Sometimes it seizes upon  
the Hips, and often leaves a Lameness hehind it ; but is more  
favourable Io the rest os the Members, and spares the smaller  
ones, as the Feet and Hands. For if it fixes on a large Mem-  
ber, which has Room to entertain it, it does not transgress the  
Bounds of that Limb; but is it begins with a small Part, it  
makes its Entrance in a mild and unexpected manner. In the  
Sciatica it begins with the hinder Part os the Thigh, the Ham,  
or the Tibia ; at other times the Pain seizes tip.on the Acetabu-,  
lqm of the OS Femoris, and then, makes an Attack upon the  
Buttocks or Loins, and seems to he any thing rather than a  
Sciatica. In the Joints it begins its Course in the following  
manners First, she great Toe is seized with a Pain; after that,  
the sore Part of the Heel, on which we lay most Stress ; then the '  
Cavity near the same Part, and last os all the Ancle-bone swells.  
The Patients ascribe their Illness to wrong Causes ; some lay  
the Fault on their new Shoes, others on a long Walk ; one  
imputes it to a Stroke, another to a Tread : Nene thinks the  
Cause to be internal, nor will the Patients believe those who are  
so wise as to tell them the Truth. For this Reason the Distem-  
per becomes incurable, because it is not opposed by a Physician  
in the Beginning, when it was in its weakest State ; but when it  
has acquired Strength with Time, all the Care and Thought  
spent about it are thrown away. Some then are fetter'd with  
the Gout in their Feet during Life; in others St extends itself  
through the whole Compass os the Body ; but sor the most part-  
it rushes from the Feet upon rhe Hands; for the Difference is  
riot much, whether the Disease be in the Hands or the Feet,  
both these Parts being of the same Nature, stender and Void os.  
Flesh, most exposed to the outward Cold, and most remote  
from the internal Heat. Hence it ascends to the elbow and  
Knee, and seizes on the Acetabula os the Offa Femoris, where  
altering its Course, and winding about, it. makes a Transition  
to the Muscles os the Back and Thorax. The Disorder spreads  
at an incredible rate, takes Possession of the Vertebrae os the  
Neck and Spine, and fixes itself on the Extremity of the Os  
Sacrum 7 and though all these Parts labour under one common  
Disease, each Part has its peculiar Pain. To proceed, the  
Tendons, Glands, and Muscles, suffer all together under Pain  
and Tension ; the Muscles os the Jaws, and of the Temples,  
arid afterwards those os the Kidneys and Bladder; and, what is  
most os all to be admired, the Very Nostrils, Ears, and Lips,  
are affected \*, for Nerves and Muscles are found in every Part.

A certain Person was afflicted with a Pain os the Sutures of  
the Head, and being ignorant of the Parts affected, described  
the Figures of the Sutures, aS the oblique, strait, and transverse  
\* Sutures, on the sore and hinder Part of the Head, complaining  
i of a- dull Pain which had fix’d itself in the Bones ; for the Diss  
'ease prey'd as much upon every Closure of the Bones, as upon  
a Joint of the Foot or Hand. The Joints are also beset with  
I Callosities, which at first resemble an Abscess ; but growing

- \* Μ. Petit here takes Occasion Jo profess his Wonder, how *Aretaus,* so exact and masterly in his Descriptions, should overlook what

*- AEtius* aster him observed, which was, that in the Extremity of the Disease the Iris is sometimes affected.

more and'more condensed, and the humid Matter being eon-  
creted. Inflexion becomes painful. At last white, solid Sub-'  
stances, or Tophi, are formed, and small Tubercles, like Pim-‘  
ples in the Face, and sometimes bigger, overspread the Part.  
The Humour itself is white, thick, and os a Substance like  
Hail; and indeed the Nature of the Disease is to diffuse a Cold-  
ness like that of Hail over the Body. To some this Distemper  
seems tor consist in something different from Heat or Cold, for  
*swe* receive Pleasure sometimes from one, and sometimes from  
the other; but I am os Opinion, that the Disease is one in  
Essence, and has one Cause, that is, innate Cold. But if it  
should increase very sast, and there appear all the Signs of Heat,  
there is Need os Refrigeration, in order to mitigate and repress  
the Violence of this, winch they call the hot Species of *Arthri-. '  
tis.* But if the internal Pain of the Nerves continues, and the  
Joint be cold, without any Swelling, ths Disease may he said  
to he of the cold Kind, for which heating Medicines are  
required for restoring Heat to the Part. And for the most part  
fuch Medicines aS are endued with a great deal of Acrimony are  
necessary to he used, which, by their stimulating Warmth,  
may raise the collapsed Parts into a Tumor, and draw the in-  
ternal Heat to the Superficies ; after which Refrigerants may he  
serviceable, as appears from considering that the same Treat-  
ment does not always agree with the same Patients ;. for what is  
beneficial at one time, proves hurtful at another; bus, to say  
alltn a Word, Heat is necessary in the Beginning, and Cold at  
the End. The *Podagra* is seldom perpetual; sometimes it takes  
its Leave of the Patient for a long time together, hecause it hap-  
pens to be rarefy'd. A gouty Person at the Olympic Games,  
on a Remission of his Fit, won the Prize at a Foot-race.

Men are more subject to this Distemper than Women, but  
endure it better ; on the contrary. Women are not so fre-  
quently afflicted with it as Men, but more severely. For whet-  
ever EViis we submit to from Necessity, their strange and unfa-  
miliar Form increases the Calamity. The Age which lies most  
obnoxious to the *Arthritis* is after siVe-and-thirty; but it may  
he contracted sooner or later, according to the Constitution,  
and way of Living. The Pains indeed are great, but the Sym-  
ptoms which accompany them are more to he dreaded ; such  
are, a Lipothymy at bring touched. Inability to move. Loss  
of Appetite, Thirst, and want of Sleep. If the Patients reco-  
ver, just aS if they had escaped from Death, they lead a remiss  
Lise, becoming intemperate, open, merry, bountiful, and  
luxurious in Diet ; and, as if they were sure to escape from  
Death once more, enjoy the present Lise with all manner of  
Freedom. The *Podagra* often degenerates into a Dropsy, and  
sometimes into an *Asthma,* in which Cases Death is unavoidable,  
*Aretaus* πέρι άιτ. καὶσημ. χρον. παθ. *Lib. it Cap: 12.*

\* \* \* pood, and Radishes often, after which recourse must  
he had to Hellebore. The Diet in such Cases must he such as  
is commonly prescrib'd in other chronical Disorders; and, next \_  
to Diet, Unctions, and cold Bathing in Sea-water, are the  
most usual Remedies sor all gouty Patients. Hellebore is indeed  
a noble Medicine in the first Attacks of the Gout; but if the  
Disease be grown inveterate, and descend by hereditary Succes-  
sion froth the Parents, it accompanies the Patient to the Grave.

The following Method is advisable under a Fit os the Gout :  
Let the affected Part be wrapped in Sheeps greasy Wool, and  
embrocated with Wine and Oil os Roses. Some heve received  
Benefit from the Application of a Sponge dipt in Oxycrate.  
After these let a Cataplasm be made os Bread, and Refrigerants,  
as Gourds, Pompions, the small Gourd, Plantain, and Rose-  
leaves. The Herb *Sideritis* is also a Lenitive, used with Bread,  
Moss; Comfrey-roots, the Herb Cinquefoil, and Horehound  
with fine flender Leaves, the Decoction *os* which drank miti-  
gates Pain; and the Herb, with Crums of Bread and Barley-  
flower, makes a Cataplasm. Also that Part of a Citron which is  
not eatable, together with Polenta, is an excellent Remedy;  
and so are dry Figs and Almonds, with Meal of one sort or  
others These Remedies are of the Class of Refrigerants; and  
some of these have been found to relieve in particular Cases, and  
the same has also sometimes been effectual in others.

' Others require heating Medicines, and among these the same  
does Good to different Persons, on a different Account. The  
following is commonly esteemed as an excellent Lenitive: Feed  
a Goat with Iris, as much as it will eat ; and after allowing **a**sufficient Tune for Digestion, kill the Goat, and let the Path  
ent put his Feet into its Belly amongst the Dung. There are a  
.thousand Remedies for the Gout ; sor this Distemper puts every  
one who has the Missortune to labour under it upon being hts  
own Physician. *Aretaus cregi* θεραπ. χρον. παθ. *Lib.* 2. *Cap.* I2.

As to the Theory of *Aretaus,* it is much On A Level with  
those of later Date.

’ As *Areteeus* is imperfect with respect to the Cure, I shall  
igive the Methods of the Antients

*, Froms.C.DB.y.tysz* **AUREHANUs.**

If the Patient is costive, a simple Clyster is to he injected ;  
' and whan the Disease has arriv'd at Its greatest Height, ‘ so that  
'the Parts appear tumid and inflated. Scarification is to heused;

and if the Situation- oTtheParts will admit of. It; Cupping: -  
Glasses Or Leeches are to. he apply’th But Scarification with-  
out Cupping is the mure rattle of these Methods; serin thin  
Case there is none of thatShattering of .the Parts, which is the  
necessary Consequence of Cupping. The Bites os Leeches are. .  
also. accompanyd with . such. a. Degree of Pain, that a simple  
Scarification is still more tolerable. Vaporation with Sponges is  
also to be used; and Fomentation with warm Water, or warm  
Water and Oil; or with a Decoctiorrof Fenugreek, linseed,  
or Marshmallows. A lenitive Cataplasm is also now Io hetrfed,  
though before it was highly, improper;: because Parts that:are  
swelling, ought not to he loaded and encumbered with .any  
Weight. For tins Purpose then we are to use Breed throughly  
softened, either alone, or mixed with the boiled Roots of Com-  
frey, which the *Greeks* call σύμφιιτος, or those of Marshmal-  
lows, or such other things as we approve of for Vaporation.  
When the Disease is evidently and indisputably, on the .Decline, ,  
we are to prescribe Bathings, Variety, of Foods, and  
Water for the Patients Drink;. and in order toallay the Pain  
caused by the Distemper, we are: to use Cerats made up withe .  
sweet Oil, or *Cyprian* oh that Medicine prepared of Far,.-  
which the *Greeks* call διὰ στεάτων, thema Malagma of *Dyachylon,*or Mnaseum,.or what is commonly call'd *Diaceleos, csiDioxer  
leurn,* or *Diathalafsistum.* The Patients Body, is by little, and  
little to he strengthened by *wallring* in easy. Shoesheeisatthe:  
same time carefully to guard against every thing that. may. hurt  
him, and all Excesses, especially in Wine, Venery, and every  
thing that has a Tendency to. bring onTndigestion.. 'Tis. also  
proper to give Arthritic Patients Wax to mould soft by their  
Fingers 5 or those Instruments which the *Gymnastics* called  
*Haltcres,* are to he held in their Hands,.-and mov'd ; and these .  
Instruments ought at .first tohe of Wax.,, or Wood with ajittle ,  
Lead melted here and there into it 4. then, more weighty. Bodies  
may be given them, according to the Advances.os theCure. And ..  
even though the Disease should he long protracted, the above-  
mentioned Simplicity of Cure is to heObservededuring the Pa-  
roxysms ; but in the Intervals, the Body is.to he .strengthened  
and recruited : For.this Purpose let Gestation, .according to the  
Patients Strength, he used, then *walking* upon Ground made  
even with soft Straw, together *Vociferation,* andssinctinn.  
of the Body ; for in this Case, as well as in other Disorders of  
an old Date,- the. want of due and proper Exercise renders the  
Patients gross and corpulent, by which means .the Joints ate.'  
rack'd, and the unexercised Nerves weakened. - Bathings, are  
alfo to be employed on stated Occasions, and the Patient is tof  
have Variety of Fond of a neutral- Quality. He is also in use a  
small Quantity of mild Wine ;. but that must always he done-  
aster his Meals ; then a simple or compound *Dropax,* and a *Par.  
roptesis,* or- Provocation of Sweat by Fine, the Heat of the . Sun,.  
warm Skins, or het Sea-sand ; after these. Sprinklings, which'  
the *Greeks* call συμπάσματα, *of Nitre, Adarce,* and *Euphor-  
bium.* Then Ointments are to he apply'd ; and filch Mediol  
cines as remove Weariness and Pain, call'd by the.Gracfr *Acopa,*composed os Squills, wild Cucumber, aS also of *Euphorbium* and.  
*Adarce.* Then a *'Malagma* is to he used of what we call *Dea-  
ls alon* or *Dtadaphnidon, or Diadarce,* or 4 Lixivium of *Dia-  
stacte,* or- any thing else of a like Nature. The Rubification of  
the Skin, by the *Greeks* call'd φοινιγμὸς, is .also to he .procured  
by Applications of Mustard. He is also to he directed what the  
*Greeks* call *Drimyphagia,* or -the Use of acrid Substances, and  
the Regimen of the *Metas.ylncritic Cycle r,* as also Vomits Of  
emetic Roots, and Hellebore, and Bathings, inch as are pre-  
serihed for these who labour under *Sciaticas.* Fomentations  
are also to he used made of Decoctions of Mugwort, mr. warm  
Sea-waters Then the Patient is to use Swimming, .either in  
warm or Cold Water. The Use of natural Waters is also pro-  
per both os the hot and cold .Kind, inch as those of.the *Tyheri.*and *Cutilian* Lake in *Italy.* The. Use ofall the above-mentioned  
Remedies is to be continued, for they .will neither produced  
perfect Cure, or, which is next to it, render the Return of  
the Paroxysmsless frequent. *srti..* - Ἀ ‘ I iin

Some of the Antients prescribed Medicines in-This Disease to  
he drank for a Year,- such as that they call'd *Diacentaierion* and  
*Diafcordeon.* These were to be ‘UsedFor-a complete Yearinm-  
ning, hy those in whom the-Distfemper was not ofilongfrtanding,.  
that is, Ifthey-had not contracted it above: five Yeats before"the  
**Use** of this Course, which they did not-approve of, still xhePae  
tient’s Body- was disposed hy proper/Evacuations .sor ientering.  
upon it. Is the Course was.nSt persisted -in-tor theYear;run-  
ning, yet it. was to he followed soy the Number of Day’s os  
which a Year consists,- though considerable Intervals should hap-  
pen between them. But in my Opinion, according to the Ad-  
vice of *Soranus,lum.* long-protracted Course osimking-Medicines  
is to he dreaded in tits Consequences, since of .course the Indi-  
-naryand most-salutary Foods to which the.Patienjt was formerly  
accustomed, cannot he used by him. Thus in:some of the An-  
xients wefindrAceounts-ofsome Patients falling .into .acuteiDifr  
eases, by a constant and protracted Use of Medicines; of  
others whohave edied ofApoplexies, ^Pleurisies, and-Pefipneu-  
ironies ; 'and that others, by jthe same-means, 'have been

afflicted with a Continual Difficulty of Breathing, which**-the***Greeks* call δήσπνοςα. They who affirm, that they have found  
Advantage from such a. Course, do not advert, that the Bene-

'"fit they received was the Result of Digestion heing preserved by  
means of a good and stender Regimen ; for the Excefs of pec-  
cant Humours abating, and Health continuing, some have been  
afraid to give over their Course, and have been so much preju-  
diced in its Favour, that they could not possibly believe, that  
any other Means could contribute to their Health and Preserva-  
tion. - Some advise burning the gouty Protuberances, and Parts  
' most immediately affected. But I disapprove of this Practice,  
since it has a Tendency to draw the adjacent Parts into Consent,  
and by that means excite Tumors. Some also approve of try-  
ing different Means, and prescrihe Ointments and Cataplasms  
of widely differing Qualities, till they light on the Very Medi-  
dine by means of which the Patient is relieved ; for some things'  
seem in their Natures adapted to some Patients, and others to  
others ; and the Use of different Medicines will in different Pa-  
tients produce the same Effect ; that is, the Mitigation of  
Pain. Remedies of quite contrary Intentions have also been  
order'd in this Case ; sor Instance, laxative Medicines in Con-  
Junction with Astringents and Restorers, such as the Malagma  
call'd *Mnasedm,* or Diachylon. Some, on the contrary, have  
order'd the more Violent Astringents alone, such as *Dyation  
(ftd.* ἰτἐων in *Aitiuso Cyzicenum,* and thel *Emplastrum Erasiflra-  
iium ,* as also a Cataplasm os the Powder os *Panic* and Lint-  
feed ; and of wild Cabbage or Groundsel, or Water-sea-green,  
or Mandrakes or Henbane, or Lentils, or the Heart of a Ci-  
won, or Pompion, or Origanum, or Thyme, or Lupins, or  
purflain, or Beets, or Pomgranates with green Leaves; or its  
Blossom, which the *Latins* call *Ampullagium,* boil'd with Vi-  
negar or’wild’ Rue with Vinegar alone, or with common  
*Alica ;* or the Sediment of Vinegar with Smallage; or the  
Leaves of the Vine with common *Polenta* ; or fine Meal of  
the bitter Vetch ; or of Beans, Barley, Darnel, or Lupins,  
with the Dregs of Wine or Vinegar; or Figs boil’d with  
'Water and Wine, and beat into the Consistence of Honey ;  
then separating the harder Parts, they order the Remainder to  
he again boiled\* As also of the tender Stalks of Poppy, which  
the *Greeks* call κωδίαι ; or their Leaves, and Quinces and Pom-  
granates boil'd in Wine^and their Pulps with Honey ; or the  
Root os Henbane with Storax ; or Roots and Leaves of Hya-  
cinth and Horehound ; as also Lithe boil'd in Honey ; and  
Opium, Storax, and bitter Almonds thoroughly heil'd in *Cy-  
prian* Oil and Vinegar . With these they order the Parts af-  
fected to be anointed. Thus, without any Order, and, in a  
manner, repugnant to the Art.of Physic, they order things the  
most directly opposite, and pass from one Medicine to another,  
till they light on such aS are proper for the Disease ; since dis-  
ferent Patients are reliev'd by different Means. Tins Method  
of trying Experiments is, by the *Greeks* called σχεδιαστιζὴ πεῖρα,  
which does not adhere to certain stated Medicines for the Cure  
**os** Diseases; blit makes Trial of Numbers till the Intention is  
answer'd. Besides, it sometimes happens, that the Paroxysms  
do not seine the Patient sor a long time, and os their own ac-  
cord become gradually more gentle, and, the Disease declining  
apace, the Patient is perfectly cured. But those Medicine\*  
which are thought proper in the declining State os the Disease,  
are sound hurtful in its Beginning or first Stage, fince they are  
not applied "at a seasonable Time; they therefore think, thai  
some are relieved by one Set os Medicines, and others by an-  
other. But we ought to be very careful to adjust and pro.  
portion Medicines to the Stages of the Disease, and the Stan  
of the Patient; for, in the Beginnings of the Distemper, mode

. rate Astringents are proper ; but in its Increase and Height  
mitigating and laxative Medicines are to be used, in the De  
clension,. Emollients are proper, in the Intervals, corrobo-

- rating and recruiting Medicines take Place. But cold and re-  
. . Pellent Medicines, call'd by the *Greeks* ὸπὸκρουστιμα, are proper

even when the Disorder is attended within Erysipelas. But  
some affirm, that even in this Case Coolers are serviceable, as  
they moderate’tho Inflammation ; for their Application, say  
they, is agreeable to those burning Heats which arise from Tu-  
rners,’ and allays them just as cold Water poured into hot Wa-  
ter reduces it to a mild and tepid Heat. But this Conclusion  
is" plainly false, fince 'tis what the *Greeks* call *Sopiiifma* ; for if  
.their Reasoning was good, it would follow, that cold Substan-  
ces were proper for all Tumors. We are therefore to adjust  
Medicines'to the Naturessos Disorders, and their several Stages.

. Some in gouty Cases coinmend an *Acopum* of Toads. Some  
anoint their Feet with the Fat of a Sea-calf, and wear Shoes  
shade of its Skin. Others again boil this Animal alive, and  
.othersin Wolf, and affirm that anointing with the Oil, pro-  
duced, is of singular Efficacy ; sor many foolish Medicines are  
believed by credulous People to be effectual, hecanse they have  
been applsid at a Time when'the Disease was not fixed, blit  
beginning with a gentle Attack on the Body, and soften chang-  
ing its Appearances.

Marry have, in like manner, approv'd of Vomits exhibited  
after Meals twice or thrice every Month, imagining that by

that means the peccant Matter was hinder’d from'reaching the  
Joints, and Indigestion prevented ; not adverting that the Pa-  
tient suffer'd still more and more, smce by tins means the  
Gums become putrid, the Teeth are render'd loose, the Eyes  
distorted and weaken'd, the whole Head fill’d, the Stomach  
Violently affected, and all the Nerves drawn into Consent. A  
spare and slender Diet is therefore more commendable in this  
Case, and the Foundation of the Cure is to be laid in Absti-  
nence. .

Many Physical Writers in this Distemper recommend **.the .**more acrid Purgatives, and such Medicines as promote Urine,  
which they call *Diuretic.* But we must carefully guard against  
Irritations of the Stomach, which are Very readi.y produced by  
Variety of Medicines ; we must also take care not to irri-  
tate the Bladder, which is of a very nervous, and consequentiy  
a Very sensible Nature ; and when it is affected, by its nervous  
Quality it conveys Pain and Uneasiness to all the Parts of  
the Body: But, not to enumerate all the Errors of the An-  
tients,! think what they have written concerning the *Gont* vain,  
prolix, and frivolous ; and that the several Steps of Cure above-  
mention'd are sufficient ; but as I have hitherto made.no men-  
tion of the several Authors from .whom they were; taken, I  
shall here subjoin an Account of them. The first then is  
*Dioclet* in the Books he wrote concerning Diseases,, their  
Causes and Cures. *Praxagoras* in has third Book of Diseases;  
*Erasistratus* in the Book he wrote concerning the *Gout,* in  
which, tho' he forbids Purgatives call’d *Cathartics,* yet he pro-'  
mised a Malagma to King *Ptolemy,* a Receipt of which he lias  
not left ; tho' some People mention their having seen this  
Medicine of *Erastratus.* Many also of the Followers of *Hcro~  
philus,* and *Asclepiades* in his Books wrote To *Erasistratus,* **and.***Heraclides Tarentinus* ; and *Themison* in his second Book, of  
chronical Disease, who sometimes talks like one of the Me-  
thodic Sect, and sometimes not ; for he recommends Phlebo-  
tomy in the Feet, does not account for any Part of his Pra-  
ctice, and confounds the Qualities of Cataplasms, not distin-  
guishing hetween Astringents and Laxatives : But what occa-  
sion have we to confute his Sentiment in this Particular, since  
'tis aS well known, that Phlebotomy in the Feet occasions a  
Derivation of Humours to the Parts affected; as 'tis, that ex-  
cessive Drinking weakens the Nerves ? *Jhesselus,* however, in  
his second Book, which he ealis *Regularis,* has laid down **the**Cure of the Gout imperfectly indeed, but in a manner, con-  
sistent enough with the Principles of the Methodic Sect. *Creld  
Aurel. Chron. Lib.* **5.** *Cap.* **3. . .**

*From* **SYDENHAM.**

The *Gont* generally attacks those aged Persons who have  
spent most Part of their Lives in Ease, Voluptuousness, High-  
living, and too free an Use of Wine, and other, spirituous  
Liquors, and at length, on account of the common Inability to  
Motion in old Age, entirely left off those Exercises, which  
young Persons generally use. And further, such as are liable  
to this Disease have large Heads, and are generally of a pie-  
thoric, moist, and lax Habit of Body, and withal of. a strong  
and Vigorous Constitution, and possessed of the best Stamina:  
Vitae. '

The Gout, however, not only seizes the gross and corpu-  
lent, but sometimes, the’ less frequently, affects lean and (len-  
der People ; neither does it always wait till old Age comes;  
but sometimes attacks fuch as are in the Prime. of Lise, when  
they have received the Seeds of it from gouty Parents, or have  
otherwise occasioned it by an over-early Use of Venery,. or the  
leaving off such Exercises aS they formerly indulged to Excess ;  
and besides have had a Voracious Appetite, and used .spirituous  
Liquors immoderately, and afterwards quitted them of a sud-  
den for those of a thin and cooling kind. . .. -

When it seizes a Person sar advancedin Years, .for the first  
time, it never has such stated Periods, nor proves so Violent, as  
when it attacks one that is younger, because, he generally pe-  
rishes before the Disease accompany'd with its natural Sym-  
ptoms, comes to its Height ; and because the native Heat and  
Vigour of the Body being diminish’d, the Distemper cannot be  
**so** constantiy and effectually propell’d and fix’d upon the Joints,  
But when it comes on sooner, tho’ it may not yet fix on one  
Pars, nor prove so severe, but affect the Patient occasionally;  
keeping no certain Period, giving only a littie Pain sor a few  
Days, and coming on and going- off without any Regularity ;  
yet, however, in time it rakes full Possession, and becomes-  
regular both with respect to the Time of its coming, and the  
*Duration* os the Fit ; so that it is more severe in its Progress  
than in its Beginning.

‘‘ I shall first treat of the *Regular Gouts,* and next of the *Irre-  
gular* ; whether occasioned by an unadvised Use of improper  
Remedies, or the Weakness of the Subject.

The *Gout,* when *regular,* generally seizes the Patient In **the**folIowing manner. It comes on a sudden towards the Close of  
*fanuary,* or the Beginning of *February,* giving scarce any Sign  
os its Approach, except that the Patient is afflicted sor some  
Weeks previous thereto, with a bad Digestion. Crudities of the

Stomach, and much Flatulency and Heaviness, that gradually in-  
crease till the Fit at last commences; which,however, is preceded  
for a few Days by a Numbness of the Thighs, and a sort of De-  
scent *of* Flatulencies thro' the fleshy Parts thereof, along with  
convulsive Motions ; and the Day preceding **the** Fit, the Ap-  
petite is sharp, but preternatural. The Patient goes to Bed, and  
steeps quietly till about Two in the Moming, when He is  
awakened by a Pain which usually *seizes* the great Toe, but  
sometimes the Heel, the Calf of the Leg, or the Ankle. The  
Pain resembles that of a diflocated Bone, and is attended with  
a Sensation, aS if warm Water were poured upon the Mem-  
branes of the Part affected ; and thefe Symptoms are immedi-  
ately succeeded by a Chiiness, Shivering, and a flight Fever.-  
The Chiiness and Shivering abate in proportion as the Pain in-  
creases, which is mild in the Beginning, but grows gradually  
more Violent every Hour, and comes to its Height towards  
Evening, adapting itself to the numerous Bones of the Tarsus  
and Metatarsus, the Ligaments whereof it affects ; sometimes  
resembling a Tension or Laceration of those Ligaments, some-  
times the Gnawing of a Dog, and sometimes a Weight and  
Constriction of the Membranes of the Parts affected, winch  
becomes so exquisitely painful, as not to endure th&Weight of  
the Cloaths, nor the shaking of the Room from walking briskly  
therein. And hence the Night is not only passed in Pain, but  
likewise with a restless Removal of the Part affected from one  
Place to another, and a continual Change of its Posture : Nor  
does the perpetual Restlessness of the whole Body, which al-  
ways accompanies the Fit, and especially in the Beginning,-  
fall short of the Agitation and Pain of the *gouty* Member.  
Hence numberless fruitiest Endeavours are used to ease the Pain,  
by continually changing the Situation of the Body, and of the .  
Part affected, which notwithstanding abates not till two or  
three o'Clock in the Morning, that is, twenty-four Hours  
from the first Approach of the Fit; when the Patient is sud-  
denly relieved by means of a moderate Digestion, and some  
Dissipation of the peccant Matter, tho’ he erroneoufly judges  
the Ease to proceed from the last Position of the Part affected.  
And, being now in a breathing Sweat, he sells afleep, and upon  
waking finds the Pain much abated, and the Part affected to  
he then swell'd ; whereas before only a remarkable Swelling  
os the Veins thereof appeared, as is usual in all *gouty* Paroxysms.  
The next Day, and perhaps two or three Days afterwards, if  
the gouty Matter he copinus, the Part affected will be fome--  
what pained, and the Pain will increase towards the Evening,  
and remit about Break of Day. In a few.Days it seizes the  
other Foot in the same manner ; and if the Pain he violent in  
this, and that which was first seized he quite easy, the Weakness  
thereof soon vanishes, and it becomes as strong and easy as if  
it had never heen indisposed : Nevertheless, the Gout affects the  
Foot last seized, as it did the former, heth with respect to **the**Vehemence and Duration of the Pain : And sometimes, when  
the peccant Matter in the Beginning of the Fit is too copious for  
one Foot to contain, it affects both at the same time with equal  
Violence, but it generally attacks the Feet successively, aS above  
remarked. When it has seized heth Feet, the following Fits are  
Irregular, heth with respect to the Time of Seizure, and their  
Continuance; but the Pain always increases in the Evening, and  
remits in the Morning; and what we usually call a Fit os the.  
*Gout,* which goes off sooner or later, according to the Age of **the**Patient, is made up of a Number of these smaller Paroxysms.  
For when this Disease lasts two or three Months, it is not to  
he esteemed one continued Fit, but rather a Series or Assem-  
blage of small Fits, the last of which proves milder and shorter,  
till the peccant Matter being at length entirely expelled, the  
Patient recovers his former Health ; which in strong Consti-  
tutions, and such as seldom have the *Gout,* often happens in  
the Space of fourteen Days ; and in the Aged, and those that  
have frequent Returns os the Disease, in two Months ; but in  
such as are more debilitated, either with Age, or the long Du-  
ration of the Distemper, it does not go off till Summer ad-  
Vances, winch drives it away. During the first fourteen Days  
the Urine is high-colourfd, and, aster Separation or Standing,  
lets sail a red, gravelly Sediment ; and not above a third Part  
: of the Liquids taken in is voided by Urine, and the Body is  
generally, costive during this Time. The Fit is accompanied  
throughout with Lois of Appetite, a Chiiness of the whole  
Body towards the Evening, and a Heaviness and Uneasiness  
even of those Parts that are not affected by tire Disease. When  
the Fit is going ossa a, violent Itching seizes the Foot, espe-  
cially between the Toes, whence the Skin peek off, as is the  
Patient had taken Poison. The Disease being over, the Ap-  
petite and Strength return sooner or inter, according as **the**immediately preceding Fit hath been more or less severe ; and,  
in Consequence os this, the following Fit comes on in a shorter.  
or longer Space of Time ; for, if the last Fit proved very vio-  
lent, the next will not attack the Patient till the same Sea sore of  
the Year returns again. ......

In this manner does the regular *Gout,* accompany’d with  
its genuine and proper Symptoms, appear; but when it is ex-  
asperated, either by wrong Management, or song Continuance,

so that the Substance of the Body is in a manner changed into  
Supplies for the Disease, and Nature unable to expel it ac-  
cording to her usual Way, the Symptoms differ considerably  
from those just described : For, whereas the Pain hitherto only  
affected the Feet, (which are the genuine Seat of the morbid  
Matter, which, whenever it attacks any other Part, clearly  
proves, either that the Course of the Disease is obstructed, or  
the Strength gradually impair'd) it now seizes the Hands,'  
Wrists, Elbows, Knees, and other Parts, no less severely than  
it did the Feet before : For sometimes it renders one or more  
of the Fingers crooked and motionless by Degrees, and at  
length forms stony Concretions in the Ligaments of the Joints,  
which destroying heth the Scarf-skin and Skin of the Joints,  
Stones not unlike Chalk or Crabs-eyes appear, and may be  
pick'd out with a Needle. Sometimes the morbific Matter is  
thrown upon the Elbows, and occasions a whitish Swelling,  
almost as large as an egg, which becomes gradually inflamed  
and red. Sometimes it affects the Thigh, which seems to  
sustain a great Weight, yet without much Pain ; but thence  
gaining the Knee, it attacks that Part more Violentiy, de-  
priving it of Motion, fo as to nail it, as it were, to one Place  
in the Bed. And when it IS necessary to move the Patient,  
either on account of the Restlessness of the whole Body, which '  
is so frequent in this Disease, or some other urgent Occasion, :it ought to be done with great Caution, aS the least contrary  
Motion or Shock may perhaps give Pain, winch is only tole-  
rable for this Reason, because it soon goes off. And, indeed,  
this Necessity of moving the Patient with such Care and  
Tenderness by the Assistants, is no inconsiderable Part, of the  
Eviis which attend the *Gout* ; for an Excess of Pain does not  
last during the whole Paroxysm, in case the Part affected he  
kept perfectly without Motion. .

AS the *Gout* heretofore did not usually come on till the De-  
cline of Winter, and went off in two or three Months, it now  
continues all the Year, excepfing two or three of the warmest  
Summer Months. . And it is further to be observed, that as the  
cardinal or general Fit continues longer now than it did here- -  
tofore, so likewise those particular Fits, of which the general one  
is made up, rage a longer time; for whereas one os these did.  
not last above a Day or two before, it now, where-ever it fixes,  
does not go off till the fourteenth Day,, especially is the Feet or '  
Knees he affected thereby. To this may be added, that the :Patient on the first or second Day after its coming, besides the  
Pain, is afflicted with Sickness, and a total Loss os Appetite.

In the last Place, hefore the Disease came to such a Height,  
the Patient not only enjoy'd longer Intervals'hetween the hits,  
but likewise had no Pain in the Limbs, and the other Parts of the '  
Body, all the bodily Functions being duly performed ; whereas .  
now his Limbs, during the Intermission of the Disease, are so  
contracted and disabled, that tho’ he can stand, and perhaps  
walk a little, yet it is very flowly, with great Trouble, and  
so lamely, that it scarcely deserves the Name of walking; and  
if he endeavours to walk beyond his Strength, in order to reco-  
ver the Use of his Feet, the stronger they grow, and the less  
liable they are to Pain upon this Account, so much more does  
the morbific Matter, not wholly dissipated during this Interval,  
threaten the Bowels, to the great Danger of the Patient, aS it  
cannot be so freely thrown upon the Feet, which, in this State  
of the Disease, are never quite free from Pain, but always have  
an uneasy Sensation in some Degree.

Moreover, the Patient is afflicted with several other Sym-  
ptoms ; as a Pain in the Haemorrhoidal Veins, nidorous Eruc-  
tations resembling the Taste of the Aliment last taken in, and  
corrupted in the Stomach ; this happens always after eating any  
thing of difficult Digestion, or even no more than is proper for  
a healthy Person : Add to these a Loss of Appetite, and a De-  
bility of the whole Body, for want of Spirits ; which render his  
Life melancholy and uncomfortable. The Urine, which was  
before high-colour'd, especially in the Fits, and Voided in a  
small Quantity, now resembles that which is evacuated in a  
Diabetes heth in Colour and Quantity, and the Back and other  
Parts itch much towards Bed-time.

It also happens, when the Disease is grown inveterate, that  
afterYawning, especially in the Morning, the Ligaments of **the**Bones of the Metatarsus are violentiy convulsed; and seem to  
be forcibly press'd by a strong Hand. And sometimes, tho\* .

/ no Yawning has preceded, when the Patient is composing him-  
self to Sleep, he seeis a sudden Pain, as if the Metatarsus were  
breaking in Pieces by a Blow with a Stick, fo that he wakes  
crying out with Pain. The Tendons of the Mufcles os the  
Tibiae are sometimes seized with so sharp and violent 4 Con-  
vulsion or Cramp, that if the Pain it occasions were to last only  
a short Time, it would overcome all human Patience.'

But after many racking Pains, the following Paroxysms be-  
come less painful, aS an Earnest os the Delivery winch approach-  
ing Death is about to give. Nature being in part oppressed by  
the Quantity of the morbific Matter, and in part by old Age,  
so as not to be able to propel it constantly and vigorously to the  
Extremities ; but instead of the usual external Pain, a certain  
Sickness, a Pain in the Belly, a spontaneous Lassitude, and

which served to invigorate the Blond; and strengthen theTone  
of the Solids; whence the Strength deeays, and the Con-  
coctions are no longer duly performed; but on the contrary,  
the excrementitious Part of the Juices, which was formerly  
expelled by means os such Exercises, -is accumulated in the  
Vesseis in order to nourish the Disease. And sometimes it has  
happened, thet the Disease bath been increased by along-contiou-  
ed Application to Study and Meditation, whereby the finer and  
more volatile Spirits are diverted from their proper Function of  
assisting the Concoctions.

Again, such as are subjeil to the *Gout, besides* heving a vo-  
racious Appetite in general, principally covet Aliment that is  
difficult to digest; of which, when they heve eaten as plenti-  
fully as they usually did when they used Exercise, their Organs  
are unequal to the Talk of digesting it properly. But this way  
of Living does not occasion the *Gout* so frequently as the ex-  
cessive Use of Wine, which destroys the Ferments designed for  
various Concoctions, hurts the Concoctions themselves, and  
overcomes and dissipates the natural Spirits, by reafon of **the**Abundance of adventitious Vapours. Now the Spirits, which  
are the Instruments of Concoction, heing weakened, and the  
Blond at the fame time overburdened with Juices, all the Con-  
coctions must necessarily be depraved, as all the Viscera are **so**oppress'd. Hence the Spirits, that have long been in a decline-  
ing State, are now quite exhausted. For if this Disease pro-  
ceeded only from a Debility of the Spirits, it would equally  
affect Children, Women, and People debilitated by a tedious  
Illness; whereas the strongest and most robust Constitutions are  
principally sirbjech to it, but not before Abundance of Humours  
are collected in the Body, through the Decay and Waste of the  
natural Heat and Spirits, which in Conjunction pervert the viti-  
ated Concoctions.

Again, as each of the Causes we heve enumerated promotes  
Indigestion, so most of them contribute,' in some measure, to  
introduce a Laxity of the Habit, and Muscles os the Body,  
which makes way for the Reception of crude and indigested  
Juices, as often as they are thrown-upon the external Parts.  
For when, by lying long in the Blond, they are increased in  
Quantity, and have put on a morbid Quality, they at last ac-  
quire a Heat sufficient for Putrefaction ; and. Naturebeing then  
no longer able to regulate them, they shew themselves in the  
Form of a Disease, and fall upon the Joints, and, by their Heat  
and Acrimony, occasion exquisite Pains in the Ligaments and  
Membranes that cover the Bones; which, heing weakened and  
relaxed, either by Age or Intemperance, easily admit them.  
But mis Translation of the Humours occasioning the *Gout,* and  
forming a *gouty* Fit, happens sooner or later, according as these  
Humours are put in Motion by adequate Causes.

As to the Cute, in treating of which I shall first specify the  
things to he avoided, if regard he had to the Humours, and  
the Indigestion occasioning them, it should seem at first Vlew,  
thet the curative Indications should principally tend, first, to  
evacuate the Humours already generated; and, secondly, to  
strengthen the Concoction or digestive Powers, fo as to pre-  
vent the Accumulation of other Humours; these being **the**usual indications to he answered in most other Humoral Dif.  
easies. But nevertheless, in the *Gout,* Nature feems to have this  
singular Prerogative, to expel the peccant Matter according to  
its own Method, and deposit it upon the Joints, there to. he  
carried off by insensible Perspiration. Now there are only three  
ways proposed of expelling the mothific Matter of the *Gout,*which are Bleeding, Purging, and Sweating; but none of these  
will ever answer the End.

- Though Bleeding seems to bid fair for .evacuating the Hur  
mours, aS well those which are upon the point offalling on **the**Extremities, as thofe already in the Joints, yet it manifestly  
interferes with thet Indication, which the antecedent Cause,  
that is, Indigestion, arising from a Depravity; or Defect of  
Spirits, demands, which Bleeding further weakens and drain-  
hishes. For this Reason, Bleeding is not to be practised either  
by way of preventing an approaching, or easing a present Fit,  
especially in thesis advanced in Years, for though the Blood  
which is taken away, generally refembles Pleuritic or Rheuma-  
tic Blond ; yet Bleeding is found to do as much Mischief in  
this Disease, as it doesGoed in thofe. And Bleeding in the  
intervals, though long after the Paroxysm, is subjeol to occa-  
fionA fresh Fit by the Agitation of the Blood and juices, which  
may contioue longer, .and he attended with more violent Sym-  
ptorns than the former ‘, the Vigour..of the Blond being thus  
impaired, by means whereof the morbific Matter should be  
powerfully and constantly expelled. This inconvenience always  
happens from Bleeding in the Beginning of the Fit ’; and if it  
be used immediately after the Fir, there is great Danger, lest  
Nature, on account of the present Debility of the Blood, which  
.has lost much of its Vigour by the preceding Fit, should he so  
faridebilltated as ’to sink into a Dropfy. However, if the Pa-  
tient he young, and overheated by herd Drinking, a Vein may  
he opened in the' Beginning of the Fit ; but if Bleeding be  
always used in ’ the succeeding Paroxysms, it will soon render

sometimes a Tendency to a Diarrhcea, succeed. - When these  
Symptoms are violent, they ease the Pain of the Limbs, which  
returns upon their going off; and the Paroxyfmsare much pro-  
longed by this alternate Succession of Pain and Sickness. For  
it is to he observed, that when the Disease has continued sevc-  
mi Years, the Pain diminishes gradually every Fit, and the  
Patient at last is worn out rather by the Sickness than the Pain,  
which in there Fits, tho’ it he longer, is not near so violent as  
thet which he ufually suffer’d, when his Strength was less- sin-  
paired. But nevertheless this Violence of the Disease was or-  
dinarily recompensed by longer intervals hetween the Fits, and  
the good State of Health the Patient enjoy’d during the Inter-  
mission. For Pain in this Disease is the disagreeable Remedy  
of Nature; and the more violent it proves, the sooner the Fit  
terminates, and the longer and more perfecti is the Intermission ;  
and so on the contrary.

But besides the above-mention’d Symptoms, as the Pain,  
Lameness, inability to Motion of the Parts affectsd, the Sick-  
ness, and other Symptoms above enumerated, the *Gant* breeds  
the Stone in the Kidneys in many Subjects, either because the  
Patient is obliged to lie long on his Back, Or because the secre-  
tory Organs have ceased performing their proper Functions, or  
esse because the Stone is form’d from a Part of the same mothific  
Matter; which, however, I do not pretend to determine. But  
from whet Caufe foever this Disease proceeds, the Patient is  
sometimes at a Loss to know whether the Stone or the Gout  
he most severe. And sometimes it happens, that a Stone in  
one or both of the Ureters, intercepting the Passage of the  
Urine to the Bladder, destroys him without waiting for the flow  
Advances of the *Gout.*

The Patient is not only reduced to this helpless Condition,  
but, to complete his Misery, his Mind, during the Fit, fym-  
pathizes with his Body, so that ’tis not easy to determine which  
os the two is most afflicied. For every Paroxysm may he as  
Justly denominated a Fit of Anger, as a Fit of the *Gouty the*rational Faculties being str enervated by the Weaknefs of the  
Bndy, as to he disordered upon every trifling Occasion; whence  
the Pationt becomes as troublesome to others, as he is to him-  
fess. Moreover he is equally subject to the rest of the Passions,  
as Fear, Anxiety, and the like, which also torment him till  
the Deolension of the Disease, when the Mind is restored to  
Health along with the Body, having recovered its former Tran..  
quillity. .

To conelude, the Viscera in time are so much injured, from  
the Stagnation of the morbific Matter therein, thet the Organs  
of Secretion no. longer perform their Functions; .whence the  
Blond, overcharged with vitiated Humours, stagnates, and  
the *gouty* Matter ceases to he thrown upon the Extremities as  
formerly ; so that at last the Patient is fo happy, as to he freed  
from a most painful and butdenfome Lise, by Death, the ulti-  
mate Remedy.

But whet may he a Consolation to me, and other *gouty*Persons of moderate Fortunes, and flender Abilities, is, thet  
Kings, Princes, Generals, Admirals, Philosophers, and seve-  
ral other great Men, have thus lived and died. In short, it  
may in a more efpecial manner he affirmed of this Disease, that  
it destroys more rich than poor Petions, and. more wise Men  
than Fools; which seems to demonstrate the Justice and shift

. Impartiality of Providence, who abundantly supplies these that  
want some of the Conveniencies of Lise, with other Advan-  
tages, and tempers his Profusion to others with an equal Mix-  
ture of Evil; fo that it appears to he universally and absolutely  
decreed, that no Man shall enjoy unmixed Happiness or Mi-  
sery, but experience both ; and this Mixture of Good and Evil,  
so adapted to out Weakness, and perishable Condition, is, per-  
haps, admirably suited to our present State. J.

The *Gout* seldom infests Women, except they: are far ad-  
vanced in Years, and of a masculine Habit of Body ; for such  
as are lean and emaciated, who in their Youth, or riper. Age,  
ate seized with Symptoms not urilike the *Gout,* owe them to  
hysteric Disorders, or forne preceding Rheumatism, the mor-  
bific Matter whereof was not sufficiently carried off in the  
Beginning. Nor have I hitherto found Chlldren,.or People not  
yet arrived at Maturity, affedted with the true *Gear.* Yet I  
have known some who have felt flight Touches of it before  
Manhood ; but these were such as were begot whilst their Fa-  
ther actually laboured under the *Gant;* and let this .suffice, for  
the History of this Disease. . 2. *z... -*

Upon a thorough Attention to the: various Symptoms of this  
Disease, I judge at to proceed from an universally depraved  
Concoction; for fuch as are fubjeft to it, arc either worn out  
by old Age, or heve contracted prematurely the Infirmities of  
it by Debauchery, and henci: labour under in universal Deled:  
of Animal Spirits, wasted by the immoderate Exercise of the  
vigorous Functions in the Heat of Youth : For Instance, by  
a too early, and excessive Use of Venery ; by an extravagant1and incessant. Pursuit after Pleasures, and the like; to which  
must be added, the leaving off inch bodily Exercises on a sudden  
as they had formerly used, (whether through Age or Indolence)

i he *Gout* inveterate, even in Youth, and Cause it to spread  
more universally in a few Years, titan it otherwise would have  
ecneinmany.. . ..... ... .. . .

With respect to Vomiting and Purging, it must be observed,  
that as it is a fixed Law os Nature, and interwoven with the  
Essence of this Disease, that the morbific Matter thereof ought  
always to be tranflared to the Joints, Emetics or Cathartics  
will only invite the *gouty* Matter back into the Blood, which  
was thrown off by Nature upon the Extremities; and hence  
what ought to be thrown upon the Joints, fixes, perhaps, on  
some of the Viscera, and so hazards the Lise of the Patient,  
who was hefore in no Danger. And this hath often heen ob-.  
served to prove fatal to those who have ordinarily had recourse  
to Purgatives by way of Prevention, or, which is worse, to.  
ease the Pain in the Fit ; for when Nature is prevented; from,  
pursuing her usual, safest, and best Method of tranflating  
the morbific Matter to the Joints, and the Humours are forced,  
inwards upon the Boweis, then, instead of Pain in the Joints,  
which is either flight, or none at all, the Patient is afflicted, and  
almost destroyed, by Sickness at the Stomach, Gripings, Faint-  
jin^, and a numerous Train of irregular Symptoms. . ......

For my own part, I am abundantly convinced from much  
Experience, that either lenient, or more powerful Cathartics,,  
**of** those Sorts which are usually thought to purge the Joints,,  
prove very prejudicial, whether they he used in the Fit to lessen  
the morbid Matter; or in Its Declension, to cany off . the Re-  
mainder ; or in a perfect Intermission, or healthy State, to pre-  
vent an approaching Fit. For I have learned at my own Peril,  
as well as that of others, that Purgatives exhibited at any of  
these Seasons have, instead of doing Service, hastened the Mis-  
chief they were intended Io. prevent.. Purging, therefore,  
during the'Fit, by disturbing Nature when she is employed in  
separating the *goaty* Matter, and throwing it off upon the  
Joints, sometimes causes a considerable Disorder in the Spirits,  
winch renders the Fit more Violent, and likewise evidently en-  
dangers the Life of the Patient. Secondly, Purgatives admi-  
Differed at the End of **a** Fit, instead of expelling the Remains  
of the Disease, excite another Fit, as severe as the former  
and thus the Patient, deceived by fruitless Hopes, brings those  
Evils upon himself, which he had escaped, if the Humours had  
not heen exasperated, afresh. And this Inconvenience, I *rnfr*felf often experienced, after having had recourse to Medicine  
to expel what J esteemed the Remains os the Distemper.  
Thirdly, as to purging at certain times in. the Intervals, by.way  
of Prevention, though it must he owned, , that there is not so  
much Danger of occasioning a fresh Pit,. aS in the instance just  
mentioned, the Patient in that Case not being perfectly.*recce-  
vered,* yet, even at this Time, it is productive of a Fit,, for  
the Reasons’ above specified; and though, perhaps, it may. not.  
come on immediately, the Disease neVertheless will not go off  
entirely, by taking any Purge constantly at proper interVass;  
*for I* have known some *gouty* Persons, .who,, to recover their  
Health, not only, purged Spring and Autumn, but monthly,  
and even weekly,, andryet not one of; them escaped .the *Gout,*which afflicted them more severely afterwards, and was accom-  
panied with more Violent Symptoms, than if they had totally  
abstained from Medicine. For tho' such Purging might carry off  
**a** Part of the *gouty* Matter, yet as it does, not at all contribute  
**to** strengthen Concoction, but rather weakens it, and injures  
Nature afresh, it only strikes at one Cause, and is by no means  
adequate to the Cure os the Distemper. \_ τί  
t To these Observations it .must he added, that the fame De-  
fect of Spirits winch impairs the Concoctions in *gouty* Subjects,  
.renders their nervous System weak and languid, .sothat the'Spi-  
ritS in general are soon disturbed by any Cause .which Violently  
agitates either the Body or Miud, and consequently are Very  
Volatile, and easy to be dissipated, as they frequently are in  
hysteric and hypochondriac Patients. And from :this .TenT  
dency of the Spirits to irregular. Motions It happens, .that the  
*Gout* usually follows the (lightest Evacuation . . For .the.Tone  
of the Parts bring destroyed, which the Firmness of the Spirits,  
so longaS they continue strong, preserve? unrelaxed and healthy,  
the peccant Matter, moves without Interruption ; and thence **a**Fit immediately breaks out. . εἴ . .ss. : i

\*- But notwithstanding .this MethodEsso Very;pernicious, .yet.  
there have heen Empirics, who have; acquired a great. Che-  
racter by artfully concealing the Cathartic they, used jn this Case.  
For it. must he observed, .that whilst theMedicine operates, the  
Patient seeis no Pain At all, or but .-a flight One ; and, if a  
Course of Purgatives can be continued for. some Days, without,

Bringing on a .recent Pit, the present Paroxysm will foon gS  
off. But the Patient will suffer greatly afterwards, on account  
of the Tumult occasioned by this Agitation of the Humours.

Finally, the carrying off the peccant Matter hy Sweat is  
manifestly prejudicial, though in a less Degree, than **the**above-mentioned Evacuations ; for though it does not repel **the**morbific Matter to the Viscera, buton the contrary propeis it  
into the Habit, it is notwithstanding detrimental for these  
Reasons:

- First, Because, during the Interval of the Fit, it forces the  
Humours, which are yet crude, and not fitted for a due Sepa-  
ration, upon the Limbs; and thus occasions a Fit before its  
Time, and in Opposition to Nature.

Secondly, The promoting Sweat in the Fit throws and  
fixes the *gouty* Matter too powerfully upon the Part affected, at  
the same time occasioning intolerable Pain ; and, if there be a  
greater Quantity thereof than’ can be received by the Part  
affected, it immediately throws it upon some other Parts, and  
thus raises a violent Ebullition of the Blood and other Juices;  
and, if the Body abounds considerably with a serous Matter fit  
for the Generation of- the Gout, an Apoplexy is hence to be  
apprehended. - ’

t Hence therefore, it is a Very dangerous Practice, both m-  
this. and all other Diseases, in which it is customary to extort  
Sweats by. Art, with a View of eliminating the morbific Matter,  
without waiting till they naturally arise, to force it out too Vioy  
lentiy,.and beyond that Degree, of Concoction, .which the **Hu-**mours to be carried, off have spontaneously acquired \*. The ex-  
cellent Aphorism of *Hippocrates,* intimating, that *concocted and  
not crude Humours are to be evacuated,* holds good with respect  
**to** Sweating, as well as Purging, aS appears manifestly from that  
Sweat which ordinarily terminates the Paroxysms os Intermit-  
tents ; which, provided it be moderate, and proportioned to the  
Quantity of febrile Matter, concocted by the preceding Fit,  
relieves the Patient considerably; but in case it he promoted  
beyond the Limits prescribed, by Nature, by keeping the Pa-'  
tient constantly in Bed, a continued Fever thence arises, and,  
instead os extinguishing the. former Heat, an additional one is  
excited, fro in the Gout, the gentle breathing Sweat, that-  
generally comes on spontaneously mine Morning aster each of  
the small Fits, of which, as I have before observed, the Car-  
dinal Fit is compounded, eases the Pain and Restlesness, which  
tormented the Patient so much during the Night ; but on the  
contrary, if this gen tie Moisture,' whichris naturally os .short  
Duration, be Violently forced, and continued longer than the  
Quantity of the morbific Matter concocted by the preceding -  
Fit requires, the Disease is thereby exasperated. In this there-:,  
fore, and all other Diseases that I have met with, excepting’  
only the Plague, it is Nature's Province, more than the Physi-  
cian's, ..VI excite Sweat, as we cannot possibly learn how much  
Matter is already prepared for such a Separation/and conse-

\_ quently what Method into .he taken In order to promote Sweat.

. Since then.it evidently appears.from what has heen delivered,  
that it is both a fruitless and a pernicious Attempt to endeavour  
to pure the. Gout by evacuating Medicines, we are next to in-  
quire what other Purpose the curative Indications are to be di-  
rectedto *answer..* And, from a. thorough Attention to the Sym-  
ptoms above, enumerated, we learn, that Regard must he had  
to two Causes principally in the Cure of this Disease.

- First, The antecedent or primary Cause, or the Indigestion  
of the Humours, proceeding from a Defedt of the natural Heat  
and Spirits. Secondly; The immediate Cause, or the Heat and  
Effervescence of these Humours aster the Putrefaction and  
Acrimony, they have acquired by continuing too long in **the**Body, which is.occasioned by the Indigestion above-mentioned..  
Now these Causes differ so .much from one another, that the  
Medicines.which do Service in the one, prove pernicious in the  
other .; and hence it is, that this Disease is so difficult of Cure.  
For atthe fame time that we endeavour to cure the indigestion  
by warm Medicines, we run the Risque, on the other hand, of  
increasing the Heat os the.Humours; and on the contrary,  
whilst we strive to mitigate the Heat and Acrimony os the Hu-  
mour, .by a cooling Regimen or Medicines, we bring on Indi-  
gestion, the natural Heat being already impaired. But here,  
by. the 'immediate Cause, I do not only mean that which is  
actually deposited in theJoints, and forms the present Fit, but that  
**also**-which tstill lies concealed., in the Blood, and is not yet pre-  
pared for Separation. For all the morbific Matter \_-is seldom **so**entirely-expelled thy the Fit, how. lasting and severe.soever it  
he,;;as to leave no Remains of it in the .Body, after the Fit is

If *Sydenham* had never written rnore than this Paragraph, he had merged thereby immortal Honours. For nothing more pernicious Can  
be Contrived than to force Sweats by heating Medicines.. When the Vital Powers have rendered the morbific Matter of any acute Distemper  
dt for Expulsion, Nature will find a Method of discharging it out of the Habit; and Sweats, *if* they are necessary, will spontaneously arise,  
provided all Obstacles are removed. st- chin led'confessed, that Art may assist the vital Powers in attenuating the Mass of Humours, and render-  
ing them fit for a subsequent Extermination? This, 'however, earinoti he done by hot Sudorific?. ..Wann Remedies,\* it must be confessed, const-  
dered as Cordials, may possibly he of Advantage in the latter End ofsonie acute Cases, as they may7 rouse the vital Powers, and excite them to  
Action, when too languid ς het the great Abash 0s thefe, winch haipre'Vailed to a surprising Degree, renders this Note the more necessary,  
which does cot so much relate to the Goin, as to febrile Disorders?

with five or fix Spoonfids of the following distill'd Water  
after every Dose:

Take of the Roots of Horse-radish, sticed, three Ounces ;  
Garden SetirVy-grass, twelve Handfuls; Water-crefles,  
Brook-lime, Sage, and Mint, of each four Handfiiis;  
the Peel of two Oranges ; two Nutmegs bruised; *Brunse  
Wic* Beer or Mum, twelve Pints; Draw off only six Pints  
by the Alembic.

Of all the Medicines commonly known, *Penice* Treacle is  
the best for strengthening the digestive Organs ; but as it con-  
tains many-Ingredients that over-heat, and withal a large Quan-  
tity of Opium, an Electuary, like that above-deserib'd, may  
he more commodioufly composed of the principal warming and  
strengthening Plants. But Care must be taken to make Choice  
of such Simples as are most-agreeable to the Patient's Palate,  
hecause it must be continued a long time; that is, for the  
greatest Part of his Life.- Of all Simples the *Peruvian* Bark is  
the best; for a few Grains of is, taken Morning and Evening,  
strengthen and enliven the Blood.

’ .And, in reality, these and such-like Medicines, which  
strengthen the Blood, and quicken the Circulation, (provided  
their Heat be not owing to vinous Spirits) do most Service in  
this and most other Chronic Diseases ; inasmuch as every Dis-  
ease of this kind: is,: in my Opinion, to be reserv'd to the same  
general Cause, that is, the Indigestion of the Humours.

It is certain, that warm Herbs do great Service, where there  
is no manifest Contra-indication, not only in the *Gout,* but in  
most Chronical Diseases, as they procure a Warmth like that of  
Summer, even in the Midst of Winter; tho', if we accustom  
ourselves to use them in Summer, they will more effectually  
prevent such Diseases as are ordinarily occasion'd by the contrary  
Season: And, in reality, if. we. defer or neglect taking them  
till the Approach of Winter, at which time a considerable  
Quantity of Humours is amass'd, it is to be apprehended it may  
then he too late to have recourse to this Refuge.'

- But tho' (as I have already amply shewn) the *Gout is of so*peculiar a Nature, aS to be render'd worse by Cathartics; yet,  
in most other Chronical Diseases, Bleeding and Purging are  
to he repeated as there is Occasion, previous to the Use of the  
strengthening and stomachic Remedies here recommended; but  
when the Patient has begun to take these, they must he con-  
tinued without .any intermediate Evacuations ; for it is always  
to be remember'd, that whenever the Cure of any Disease is  
attempted by means of strengthening Remedies, all kinds of  
Evacuations prove highly injurious. . Lastly, I do not assert,  
that the stomachic Medicines, just enumerated, are the most  
excellent of the Kind ; but I maintain, that whoever can dis-  
cover the most effectual Remedy to answer this Intention, is  
able to do much more Service in curing Chronical Diseases,  
than he himself may imagine.

But amongst the Remarks I proceed to communicate, **re-**lating to the Cure of the *Gout,* it is primarily and principally  
to be attended to, that all stomachic or digestive Remedies,  
whether they he medicinal, dietetic, or relate to Exercise, are  
not to he enter'd upon superficially, but are to be persisted in  
daily with great Exactness: For since the Cause in this, and  
most other Chronical Distempers, is become habitual, and in a  
manner chang'd into a second Nature, it cannot reasonably he  
imagined, that the Cure can he accomplish'd by means of some  
flight and momentary Change made in the Bleed and Juices,  
by any kind of Medicine or Regimen, but the whole Consti-  
tution is to be alter'd, and the Body is to he in a manner fram'd \*  
anew. For it is otherwise here than in some acute Diseases,  
where a Person in full Strength, and perfect Health, is suddenly  
seiz'd with a Fever; whereas in the *Gout, ts.* Person, by in-  
dulging himself in Luxury, herd Drinking, neglecting his usual  
Exercise for several Years together, and debilitating his Conffi-'  
tution by Idleness, or an immoderate Application to Study,  
and other Errors os Life, injures, as it were designedly, the  
Various Ferments os the Body, and oppresses the Annual Spirits,  
which are the principal Instruments of Digestion ; whence the  
vitiated Juices, amass'd in the Habit, break out aS soon as they  
are exalted to the utmost State, and produce great Evils, relax-  
ing the fleshy Parts, and weakening the Joints, so that they  
readily receive the Humours thrown upon them. And in this  
manner a different Constitution is form’d by Degrees, the origi- -  
nal one heing quite destroy'd : And those Fits which engross  
the Attention of indiscreet and injudicious Physicians, are **no**more, in Effect, than the Succession and Order of Symptoms,  
resulting from that Method winch Nature ordinarily employs to  
expel the morbific Matter. Hence, therefore, 'tis a fruitless  
Labour to attempt the Cure of this Disease, by using any Me-  
dicine or Regimen occasionally ; for since this Habit is chiefly  
founded on, and consists in, a Weakness of all the Digestions,  
and a Relaxation of all the Parts, both these Disorders must he .  
remedied ; and the Strength of the digestive Powers, as well **as**the Tone of the Parts, must be restor’d and recover'd, bv De-

gene off; fo that, of course. Regard is to he had to this Cause  
both in the Fit, and during the InterVais. But as the Expul-  
sion of the immediate Cause is entirely the Bufiness of Nature,  
and to be perform'd according to her own Method, fince nothing .  
in the mean time can he done to cool the hot and acrimonious  
Humours, without injuring the digestive Powers, unless it he by;  
avoiding a hot Regimen, and Medicines which inflame the;  
Humours ; so, doubtiess, the chief curative Intention is, after  
the indigested Humours are removed, to strengthen the digestive  
Powers, which I shall now treat of; but in such manner, how- .  
ever, that I may, in the Course of this Dissertation, as Occa-  
sion offers, also mention those Remedies which tend to mini- \*  
gate the Heat of the Humours, and correct their Acrimony. :

Whatever Remedies, therefore, assist Nature to perform her  
Functions duly, either by strengthening the Stomach, so that :  
the Aliment may he well digested ; or the Blond, that it may  
sufficiently assimilate the Chyle received into the Mass; or the  
Solids, so as to enable them the better to change the Juices,  
design'd for their Nutrition and Growth, into their proper Sub- ;  
stance; and lastly, whatever preserves the Secretory Veffeis,  
and the Emunctories, in such a State, that the excrementitious -  
Parts of the whole System may he carried off in due Time andjOrder; these, and all Medicines of the same Kind, contribute -  
towards answering this intention, and are properly intitied:  
Digestives, whether they be of the medicinal or dietetic Kind,  
Exercise, or any other of those Things which are call'd the six.  
Non-naturais.

Such Medicines, in general, are those which aremoderately  
heating, bitter, or of a mild pungent Taste, inasmuch as they  
agree well with the Stomach, purify the Blood, and strengthen ,  
the other Parts. For Instance, the Roots os*Angelica -xuil Elen'  
campane,* the Leaves of *Warmwood,* the *Lesser Centory, Gcr-'  
rnander, Ground-pirie,* and the like t To winch may be added,'  
fitch as are commonly call'd *.Antiscorbutics,* as the Roots of  
*Harse-radi/h,* the Loaves of *Garden Scurvy-grafs, Water-  
crejs.es,* and the like. But these acrid and pungent Herbs, how  
agreeable and serviceable soever they may he to the Stomach,  
yet as they agitate the morbid Matter, which has long been gene-  
rated, and increase the Heat, are to be used more sparingly  
than those, which by their mild Heat and Bitterness both  
strengthen the Stomach, and mend the Blood.

And, in my Opinion, a judicious Mixture of fome Kinds of  
them answers the End of digesting the Humours better than  
any single Simple of this Class. For tho', whenever we have  
Occasion for a specific Virtue of any Medicine, it he a true  
Axiom, that the more simple it is, the better it is for the Pur-  
pose ; yet, when a Cure is intended to be made by answering a  
particular Indication, every Ingredient contributes something'  
towards curing the Disease; and in this Case, the more Simples  
the Medicine contains, the more powerfully it will operate.  
For this Reason, Various Forms of Medicines may he elegantly  
compounded *os* the Ingredients above-enumerated, and the rest  
Of the like Kind. I give the Preference to an Electuary made  
after the manner of *Venice Treacle* ; because the Fermentation  
**os** the Simples together improves their Virtues, and produces a  
third Substance; which possesses greater Virtues in the Mix-  
ture, than any fingle Ingredient in the same Quantity. ‘ But I  
freely leave the Choice of such Ingredients, and the Forms in  
which they are to he given, to the judicious Physician; for **I**never thought myself obliged to write Prescriptions, hut rather  
**to** point at the true curative Indications. The following is,  
however, the Form I myself generally make use of:

Take Of the Roots of Angelica, Sweet-stag, Master-wort,  
Elecampane, the Leaves of Wormwood, the Lesser Cen-  
tory. White Horehound, Germander, Ground-pine,  
Scordium, common Calamint, Feverfew, Wild Saxifrage,  
St. John’S-wors, Golden-red, Thyme, Mint, Sage, Holy  
Thistle, Penyroyal, Southernwood, the Flowers of Cha-  
momile, Tansey, Lily of the Valley, *English* Saffron, the  
Seeds of Treacle-mustard, Garden Scurvy-grass, Carra-  
way and Juniper-herries, of each A sufficient Quantity:  
Let the Herbs, Flowers, and Roots, be gather'd when they  
are in their utmost Perfection; dry them in Paper Bags  
.till they are reducible into fine Powder. To six Ounces  
of each, well mix'd together, add enough of clarisy'd  
Honey and Canary to make the Whole into an Electuary,  
of winch let the Patient take two Drams, Morning and

.Night.

Or, for want Of this, let the following he used:

Take Of the Conserve of Garden Scurvy-grass, an Ounce  
and an half; *Roman* Wormwood, and Orange-peel, of  
each an Ounce; candied Angelica and Nutmeg, of each  
half an Ounce ; *Vinice* Treacle, three Drams ; compound  
Powder of Arum, two Drams ; and, with a sufficient  
Quantity of the Syrup of Oranges, mix them up into an  
Electuary : Let two Drams of it he taken twice a Dav.»

grces, to the former healthy State. But’ the’ it may seem im-  
- possible to accomplish this End effeelually, not only because any  
particular Habit cannot easily he changed into a contraryone,  
but also hecaufe old Age, which ordinarlly accompanies this  
Disease, greatly obstructs this Design; yet the Cure, is to be  
attempted, as far as the Strength and Age of the Parient /will  
permit, who will have the *Gout* more or less severely, in pro-  
portion to his Advancement in Years.

Further, it is to be observed, that digestive Remedies, either  
of the medicinal or dietetic Kind, are to be used principalryin  
the intervals of the *Gout,* and at as great a Distance aS may he.  
from the subsequent Fit: For Age obstructs the Cute so much, j  
that the strengthening the digestive Powers,the recovering the,  
debilitated Ferments of the Body, and restoring the Blood and-  
Vifcera to their due healthy State, cannot be speedily accom-7  
plish’d, and requires a continued Use of Medicine. - .

But tho’ these and the like Remedies do Service, .yet sheyj;  
are not able, alone, to answer this Intention of strengthening,-  
but require .the joint Assistance of fuch Things as do not pro-4  
perly belong to Medicine ; it bring an Error to imagine, that;  
this, or any other Chronical Disease, can be cured, by Medi-  
. cine alone. (I.) Therefore, Moderation in Eating and Drink-:  
ing is to he observed; /so as, on the one hand, to avoid taking,  
in more than rhe Stomach can conveniently digest, and of course;  
increasing the Disease thereby ; and, on the other hand, defraud-,  
ing the Parts, by immoderate Abstinence, of the Degree of.  
Nourishment requisite to preserve the Strength, which wilT  
weaken them still more ; either of these Extremes being equally  
prejudicial, as I have often experienced, both in myself and:  
others. (2.) As to the Quality of the Fond, the’ whatever,is;  
. eary of Digestion, singly consider’d, deserves the Preference,,  
yet Regard must be had to the Palate and Appetitebecause it-  
is frequently sound, that what the Stomach earnestly covets,:  
tho’ of difficult Digestion, docs nevertheless digest hetter than;  
what is esteem’d of easier Digestion, in case the Stomach nau-;  
states it; but, however. Aliments, difficult of Digestion, should,  
be used sparingly. (3.) I am of Opinion, the Patient ought  
to eat only of one Dish at a Meal, because feeding on disserent.  
Sorts of Flesh injures the Stomach more than - eating an equal:  
Quantity os any one Kind ; but, excepting Flesh, he may eat  
other Things at Pleasure, provided they be not acrid, nor sea-  
son’d with Salt or Aromatics ; because, tho’ such Fond does nor  
hurt Digestion, it nevertheless does Mischief by agitating the  
morbific Matter.

. As to the Times of Eating, rt is prudent to eat at Dinner  
only; for, as the Night should seem peculiarly design’d to digest  
the Humours, it would be wrong to waste that Time in digest-  
ing the Aliment. For this Reason, *gouty* Persons should for-  
bear Supperi; but they may drink a large Draught of small  
Beer, as. bring generally subjeol: to the Stone in the kidneys ;  
the Increase whereof'is considerably prevented by drinking such  
a Liquor at this time, as it cools and cleanses the Kidneys.

- A Milk-diet, or the drinking Milk, either as it comes from  
the Cow, or boil’d, without adding any thing to it, except  
perhaps a Piece of Bread once a Day, heth been used these  
twenty Years past, and bath done more Service in abundance  
of χομόγ .Subjects, whilst they persisted in it exactly, than all  
other kinds of Remedies: But upon quitting it, and returning  
to the ordinary way of Living of healthy Persons, the’ they  
ofed the mildest and slenderest Diet, the *Gout* return’d with  
-.much more Violence than ever; for, as this Regimen weakens  
the Constitution,, the Patient cannot S0 well struggle with the  
Distemper, whence, of course, it proves more dangerous and  
. lasting. Whoever, therefore, intends to begin and go on with  
this Regimen, ought, before-hand, to consider maturely, whe-  
ther he be able to persevere in it for Life, which perheps he will  
find too much for him, tho’ he should have great Resolution.  
For I knew a Nobleman, who, after living a whole Year on  
.Milk, ooly with much Pleafure, during which time he had one  
or more Motions every Day, was constrain’d to leave it off,  
.because be grew costive on a sudden ; the Temper of his Body  
was alter’d, and his Stomach at last nauseated Milk, tho’he  
had still a Liking to in

- Again, it is observable, that some Hypochondriac Persons of  
a gross Habit of Body, or those who have been long used to  
drink spirituous Liquors freely, cannot bear Milk. And fur-  
ther, the short and fleeting Benefit which those who can bear’  
Milk receive from this Regimen, is not only derivable from its  
.exceeding Simplicity, whence I doubt not but Water-gruel  
may have the fame Estedt, provided the Stomach will bear it; 1but from its rendering the Blood softer and smoother, by blunt-  
ing the sharp Particles contain’d in the Mass. And moreover,  
-which I esteem the principal Thing, Milk, being an Aliment  
-that is absolutely unfit for grown Persons, represses that tumul-  
tuary Motion of the Humours which occasions the *Gout*; and  
for this Reason, the few with whom it agrees, escape this Dis-  
ease, fo long as they live upon Milk only, but no longer : For  
-as it runs directiy counter to the original Cause of the *Gout,*which is the Debility of the Digestions and Ferments, ft does

much more Mischief in this respeil, than Benefit in the other;  
And for want os sufficient Attention to this Particular, some  
inconsiderate People have fallen into gross, and manifestly fatal  
Errors ; haying, by attempting to attack the containing Cause .  
of the Disease, that is, the Heat and Acrimony os the Humours,  
destroy’d the Digestions, and all the natural Functions.

. As to Liquors, those are best, in my Opinion, which are  
weaker than Wine, and not so weak as Water; such as out  
*Linden* small .Beer,- hopp’dor.uuboppil, Extremes on either  
hand being pernicious. For, firstjoas to Wine, who’ the' com-  
mon Proverb\*, intimates, that whether a Person does,' or does  
not, drink Wine, he will have the *Gout.,* yet it is certain, and  
confirm’d bysthe Experience of abundance os *gouty* Patients,  
that.Wineiis, in Fait, detrimental; For tho’ it may be sup-  
posed to do Senice by strengthening the digestive Powers, the  
Weakness whereof I have long look’d upon as the'Antecedent  
or primary Cause os the *Gout*; .yet; with respecti to the con-  
taining Cause: thereof, it must be deem’d wholly pernicious,  
because it inflames and agitated the"Humours which seed the  
Disease.. Neither do w.e grant, that Wine, used by way of  
common Drink,' helps Digestion ; but rather assert, that it de-  
stroys is, unless in such as have been long inur’d to jo" For  
the’ Wine may, in pasting thro’ the Vessels, communicate some.  
Heat to the Parts, yetit certainly depraves the Ferments of the:  
Body, and wastes the natural Spirits : And hence I .conceive it  
is, that greatDiinkers generally die' of the *Gout,* Palsy, Drop-’  
*fys* and- other, cold Diseases. . Furthermore, the coniinced and'  
immoderate Use of Wine relaxes and enervates the Body, ren-.  
dering it like the Bodies of Women ; whereas moderately heat-  
ing‘Liquors strengthen the Tone os the Parts; whence such as;  
have always drank small Liquors are rarelySffiidted with the  
*Gouri* It must farther be remark’d, that these'are chiefly'  
subject to this Disease, whe, tho’ they have naturally a weak  
Digestion, .do notwithstanding receive too mucti’Nourishment .  
from a certain Richness *of* the Blood, and hade their Bulk in-  
creased by 4.5 Kind of indigested Matter, instead of a solid,  
wholsorne Substance: And the Use of Wine adds to this Rich-,  
ness of the Blood, and so not only amasses a new Collection of  
Matter, hut also, aolually occasions the Disease, by stirring tin  
the Cause of it, which had long lain conceal’d and inactive.  
Again, as .the Blond of *gouty* Subjects nearly resembles that  
which is taken away in a Pleurisy, and other in fiamniatory Dis-  
eases, it is absurd to inflame it more with spirituous Liquors.  
And it is as dangerous, on the contrary, to have recourse to'  
over-cooling Liquors, which, by utterly destroying both the'  
Digestions, and natural Heat, do more Mischief; nor occasion-  
ing Pain, as Wine doth, hut Death itself; as Experience  
evinces in those Persons, who, having accustom’d themselves to  
drink Wine freely from their Youth upwards to old Age, and  
quitted it on a fudden for small Liquors, have foon destroy’d  
themselves thereby. \* ’

*. Gouty* Persons should therefore observe it as a Rule in this  
Particular,, to drink such Liquors as will not inebriate, is  
drank in a larger Quantity, or injure the Stomach by their  
Chllfiess. Of this Kind, as I before hinted, is our small  
Beer; and-in other Countries a simllar Liquor may be made,  
by dll uting Wine well with Water.

As to Water done, I esteem it crude and' pernicious, and  
have sound it fo to my Cost ; but young Persons may drink it  
with Safety; and it is, at this Day, the common Drink of the  
greatest Part of Mankind, who are more happy in their Po-  
verty, than we are with all our Luxury and Abundance. This  
is confirm’d by the great Multitude, of Diseases, with which  
we are assiictsd upon this Account, as rhe Stone, *Gout,* Apo-  
plexy, and Palsy; besides the Injury done to the Mind in  
being forcibly actsd upon, contrary to its natural Rectitude,  
by the Disturbance which the preternatural Spirits of such Li-  
quors, together with the Animal Spirits, which are subservient  
to Thinking, occasion, by volatilizing it too much, and fug-  
gesting vain and idle Notions, instead of solid and weighty  
Reasonings; and thus, at length, rendering us facetious and  
witty, instead of wife; hetween which the Difference is almost  
as great, as between a Substance and a Shadow. But enough of  
this.

But the’ a Person who hes the *Gout* mildly, and duly at In-,  
tervals, need ooly ufe small Beer, or Wine diluted with Wa-  
ter, this Degree of the Disease not requiring a stricter Regi-  
men; yet, when the whole Substance of the Body is in a man-  
ner degenerated into the Gout, it cannot be conquer’d without  
a total Abstinence from all Kinds of fermented Liquors, how  
fmall and soft soever they-be; inasmuch as all Liquors ofthis  
Kind contain a pungent Spirit,-with some Degree of-Acrimony ;  
and, whet is worst:, being possess’d of a Ferment, they dispose  
the Humours to a perpetual Fermentation,- in the same man-  
ner as Yeast, added to Malt Liquors, communicates ’ its fer-  
menting Quality th the whole Liquor. For this Reason a  
Diet-drink is to he order’d for common Drink, to be made of  
those Ingredients which are commonly known and ofed for  
this Purpose; but it must not be too strong because in -that

Case it will inflame the Humours as much as Wine; neither,  
on the contrary, must it he so small as to injure the natural  
Functions by over-cooling. And this kind of Drink, pro-  
vided it be made of such Ingredients as are most agreeable to  
the Patient, tho' it may occasion some Loathing sor the first  
Week or Fortnight, nevertheless proves as agreeable afterwards  
as any other Liquors he has been used to drink. It will also  
excite the Appetite, and render it more natural than it used to  
he with fermented Liquors; and will be attended with this fur-  
ther Convenience, that whoever uses it for his own common  
Drink, may indulge more freely in other kinds of Diet, than  
when he drank Wine or Beer : For the Errors in. point of Diet,  
which it is hardly possible to avoid entirely, will be, in some  
measure, corrected and amended thereby. Bu tithe principal  
Benefit, derivable from it, is its preserving from the Stone,  
winch is the general Attendant of the Goat; as sharp and  
attenuating Liquors both contribute to breed the Stone, and  
occasion a Fit thereof. I prefer the following Decoction for its  
agreeable Colour and Taste: z .

I δ . ...... . . , .’ L ; su  
' Take of Sarsaparilla, fix Ounces; Sassafras-wood, China-

root, and the Shavings of Hartshorn, each two Ounces ;

Liquorice-root, an Ounce Boil them together in two  
7 ‘ Gallons of Spring-water-for half an Hour ;- afterwards in-  
- fuse them upon hot Ashes, close cover’d, for twelve

Hours.; - then boil them till a third Parr of the Liquor is  
:exhaled ;’and as soon as it is taken off the Fire, infuse  
- \* therein half an Ounce of Aniseeds for two Hours. Lastly;

strain- it off, and let itTest, till it becomes clear, and put

- It up into Bottles for **Use.**

It is most proper to begin with this Decoction, immediately  
after the Fit of the *Gout* -is goneoff; and it must be continued,  
both in-theFit, and in the Intervals, during the Remainder os  
Lise. - For it is not sufficient at a time when the Disease  
actually rages to study for new Medicines, as Nature, whilst  
**the** Humours are in fuch Commotion and Disturbance, cannot  
well bear the Exchange os fermented Liquors of an active and  
spirituous Quality, for fuch as are small and without Spirit. At  
the fame time-the above-mentioned Electuary must be used,  
taking it-in like manner, both in the Fit, and-in the Intervals;  
for the Warmth of this will in some measure correct the Small-  
ness of the Diet-drink, as it will communicate a due Degree of  
Heat to the Blood and.Vsscera, without that Agitation winch  
is generally occasioned by the Heat of fermented Liquors.

- If it be objected, that a total Abstinence from Wine, and  
Other fermented Liquors, would render Life in a manner infup-  
portable,-1 answer, it must be considered; whether in be not  
much worse to be tortured daily by the Pain accompanying an  
inveterate *Gout,* (for, when it is gentie, there is no Need of so  
strict a Regimen) than to be confined to this Decoction, which  
if the Patient continues, he may indulge himself in most other  
Eatables; not to repeat, that this Drink, like all other things,  
grows pleasant by Custom. Doubtless, whoever hath had this  
-Disease; supposing him not Void os Reason, will not hesitate at  
all, to which he should give the Preference.

But notwithstanding, if the Patient, either from a long-con-  
tinued and immoderate Use os spirituous Liquors, from Age,  
**or,** lastly, from great Weakness, cannot digest his Food with-  
out Wine, or some other fermented Liquor, 'tis certainly dan-  
gerous sor him to leave off Wine on a sudden; an Error that  
has in Reality destroyed Abundance of People. Such a Person,  
therefore, in my Opinion, should either not use the dietetic  
Apozein above prescribed; or, if he be resolved to take it,  
should accustom himself to it by Degrees, (drinking a Glass *os*Wine for some time at Meals) and rather by way of Medicine  
' than Diet, till it becomes more familiar to him. But *Spani/h*Wine is to be prefers'd here to *Rhenisu,* **or** *French* Wine,  
these last being subject to exasperate the Humours, and increase  
the morbific Matter, notwithstanding they are Very grateful to  
the Stomach. To which we may add, that as they are almost  
as crude and indigested as our Cyder, they are consequentiy not  
**so** warm and cardiac, as the Case demands. And these Particu-  
lars may suffice concerning the Dint of *gouty* People. There is  
another Caution to be inculcated, which, though it may seem  
trifling, is of great Moment, both in digesting the *goaty* Mat-  
ter during the Fit, and preventing the Generation thereof in **the**Intervals ; and that is going to Bed early, especially in Winter;  
for, next to Bleeding and Purging, nothing impairs the Strength  
more than sitting up late at Nights; which every Valetudina-  
rian can affirm from his own Experience, provided he has only  
carefully observed how much more vigorous and chearful he  
rises in the Morning when he goes to Bed early, and how lan-  
guid and faint he has found himself after sitting up late. And  
tho' there should seem to be no Difference betwixt going to Bed  
earlier or later, provided a Person lies in Bed for the same time, as  
for Instance, whether he goes to Bed at Nine and rises at Five,  
or at Eleven and rises at Seven, it is not an indifferent Matter;  
and I conceive, for this Reason principally, that in **the Day the**

Spirits are dissipated, either.by Exercises of the Body or Mind,  
which are so weak in Valetudinarians, that they require the  
Assistance of Sleep earlier in the Evening ; and, as the Ap-  
proach os Night occasions a kind os Relaxation of the Animal  
(Economy, which was preserved in the Day by the Heat os  
the Sun, the Heat of the Bed hecomes necessary to supply the  
Place of the Sun, especially during the Winter Season. But  
the Spirits heing refreshed and invigorated in the Morning by  
the preceding Nightts Sleep, together with the Warmth of the  
Bed, and the.ensuing Day likewise strengthening the Tone of  
the Parts still more, the rising early at this time, though it  
may take an Hour or two from the Morning Sleep, hurts he  
Constitution less than sitting up an Hour or two later-in the  
Evening. This being the Cose, I would advise such as are fub-  
ject to the Gout-to go .early to Bed, especially in Winter, and  
th rise hetimes in the Moming; though their having- had less  
Sleep than usual may incline them to lie longer, in order to  
make it up. For the Sleep which is got in the Morning will  
rob them of as much the ensuing Night ; and thus at.last by do-  
ing Violence to Nature, and despising its wise Lessons, the  
Night may he preposterously turned into Day, and the Day in-  
**to** Night. - ' ; -

*s* The Patient must also use his" utmost Endeavour to keep his  
Mind easy, as all unbounded Appetites, and inordinate Passions,  
eminently tend to diflolve the Texture ofthe Spirits, which are  
the Instruments of Digestion, and fo' of course to increase the  
*Gout.* He should therefore wisely reflect on his Mortality,  
and not Vainly imagine he is to escape the Eviis that are neces-  
sarily annexed to this State. For; whether any Affliction of  
Mind besals him through his own Fault, or that os others, sior-  
tain it is, that he- will - never be able to prescribe Laws to the  
World, which has not always obey'd any smgle Person hitherto,  
how powerful and wise soever he has.been; nor will every thing  
always answer any one's Expectation so exactly, as he may -have  
promised himself; - and perhaps, whilst he is intent npon-worldly  
Affairs, unexpected Death renders him an Example of human  
Frailty, whilst^ he foolishly deprives himself of the transitory  
Enjoyments os Life.- Too much Application to Study and Bu-  
finest is likewise equally pernicious; for as thin Disease is more  
frequently accompanied with Melancholy than any other, such -  
as are subject to st ordinarily fatigue and-oppress the Spirits to .  
that Degree, by long and intense Meditation,:eyeniwithont-the  
artificial Help of Books,, that the Body cannot long preserve it-  
self in a healthy State; and henceI conneive'it'is, that few  
Fools have had the *Gout.' - .δ᾽*

But nothing-so effectually prevents the indigestion sis the Hu-  
mours, (which I esteem the principal Cause of the *Gouso* and  
consequentiy strengthens the Fluids anssSolids, as Exercise. : It  
must, however, be observed, as Lheve already mentioned, that  
as there is more-Necessity sor making a thorough Change in the  
Constitution in this than in any other Chronical Disease, so Ex-  
ercise, unless it be -used daily, will do no Service; for if it he  
intermitted at times, it will atjail. little towards changing the  
Constitution, now reduced to a languishing and effeminate Con-  
dition by Idleness and Indulgence, and may perhaps do Mischief  
by caufing a Fit, after leaving it off *for* a considerable Spade of  
Time. But Exercise should be moderate, because the contrary  
in aged Persons, who are principally subject to the *Coes,* wastes  
the Spirits too much, and consequentiy hurts the digestive Fa-  
culties. And though this may not be relished by one, who  
besides old Age, Inability to Motion, and Slothfulness, which  
are natural in this Disease, is likewise tormented with Pain, yet,  
if Exercise be omitted, all the Remedies which have been 'hi-  
therto discovered will not avail. And aS the Intervals hetween  
the Fits cannot be long without constant Exercise, so the Pa-  
tient will likewise without it he more subject to the Stone,  
which is a more dangerous and painful Disease than the *Gout.*’ To these add a Particular os some. Importance, which is,  
that the chalky Concretions are considerably increased in the  
Joints, and especially in the Fingers by long Inactivity ; so that  
at last these Parts are entirely deprived of Motion. ¥ or, how-  
ever positively some may assert, that the Matter of.thefe Con-  
cretions is only the Tartar of the Blood tranflated to the Joints,  
**it** will nevertheless readily appear,; upon .considering the Matter  
**with a** little more Attention, that when a large Quantity of  
indigested *gouty* Matter sails upon some os the joints, and oc-  
casions a lasting Swelling of the neighbouring Parts, it happens  
at last partly from their assimilating Properly’ being destroyed,  
and partly from the Obstruction caused therein by this sluggish  
Humour, that this Matter is generated ; which is changed into  
-this kind of Substance by the Heat and Pain of the Joint, and  
increased every Day in Bush, converting the Skin and Flesh os  
the Joint into its own Nature, and may be got out with a  
Needle, and resembles Chalk, ' Crabrs-eyes, or some similar  
Substance. But I.have experienced in my ovrn Case, that not  
only the Generation of these Concretions .may. he prevented by  
dally and long-continued Exercise, which duly distributes, **the***gouty* Humours throughout the whole Body, that otherwise  
readily attack a particular Part buss in also dissolves old and in-

durated Concretions, provided they he not come to such a De-  
gree of Hardness, as to change the external Skin into their Sub-  
stance.

As to the Kind Of Exercise, Riding on Horsehack is certainly  
the best, provided it he not contra-indicated by Age, or the  
Stone; and indeed I have often thought, if a Person was pos-  
fessed of as effectual a Remedy as Exercise is in this and most  
Chronical Diseases, and had the Art also of Concealing is, he  
might easily raise a considerable Fortune. But if Riding on  
Horseback cannot he used, frequent Riding in a Coach nearly  
answers the same End; and in this respect at least, the Gene-  
rality of *gouty* Persons have no Couse for Complaint, because  
their Riches, which excited them to indulge those Excesses  
that occasioned the Disease, enable them to keep a Coach, in  
which they may take the Air, when they cannot ride on Horse-  
hack. It must he remark'd however, that a wholsome Ain is  
greatly preferable to one which is unwholsome for this Purpose :  
Thus the Country is better than the Town, where the Ain is  
full Of Vapours that exhale from the Shops Of different Mecha-  
nics, and render'd still more dense by the Closeness of the  
Buildings, as it is in *London,* which is esteemed the largest City  
in the Universe. But the great Difference there is between  
using Exercise in the Country, Or in Town, a *gouty* Person  
will soon find upon Trial.

With respect to Venery, if the *gouty* Patient he in Years, as  
he is unprovided now with a sufficient Share of Spirits to pro-  
mote the Digestions, and his Joints, and the neighbouring  
Parts, are consequentiy too much debilitated and relaxed, with-  
out any Assistance from this destructive Quarter; in this Case,  
**I** say, it is as imprudent for such an one, in my Opinion, to  
indulge those Pleasures, as it would he for a Person, after  
having engaged to go a long Journey, to spend all his Stock  
of Provisions before setting out. Moreover, besides the Mif-  
chief it does himself, for want of restraining the languid Inclina-  
tions of declining Age, he loses the great Privilege of anjoy-  
ing that exquisite Satisfaction, which by the particular Indul-  
gence of Nature is reserved for the Aged only, who, towards  
the Period of their Lives, are freed from the Violence of those  
Passions, which, like so many savage Bealls, prey'd upon them  
perpetually in Youth; the Gratification of them heing by no  
means an Equivalent for the long Train of EViis which either  
accompany, or follow it..—And set this suffice for the Regi-  
men.

Bu t th ouch a *gouty* Person, by Carefully observing these Rules  
relafing to Diet, and the rest of the Non-naturals, may pre-  
vent Violent Fits, and so strengthen the Blond, and solid Parts,  
as to free himself from that Multitude os Evils, which render  
the Disease not only intolerable, but in, the End, fatal ; yet,  
notwithstanding, aster some intervals, he will sometimes he  
seized with the *Gont,* especially towards the Close of Winter.  
For though in the Summer-season, whilst the Tone and Strengh  
of the Blood are mended, and preserved in that State by **the**Heat of the Sun, and Perspiration goes on in a proper manner,  
**the** Digestions must necessarily he much hetter performed than  
in Winter; yet, as the Blond is weakened, and Perspiration  
obstructed, upon the Approach of this Season, there must neces-  
sarily he a copious indigested Matter amassed, which at last, by  
its long Continuance in the Habit, will form a Distemper, and  
manifest itself by proper Symptoms, giving a Fit upon the first  
Occasion, either by the Humours heing put into Motion by  
the nearer Approach of the Sun, the Use *of* Wine, violent  
Exercise, or any other evident Cause.

'Tis clear from what has been delivered, that whoever under-  
takes the Cure of this Disease, must endeavour to make a tho-  
rough Change of his Habit of Body, and restore it to its  
former Constitution, as far as Age, and other Circumstances,  
will permit; and this must he attempted only in the Intervals  
between the Fits. For when the morbific Matter is not only  
generated, but already thrown upon the Joints; it will he too  
sate to endeavour to change it, or to expel it, any other way;  
since it must he expelled by that Method only which Nature  
points out, and the Business is to he left entirely to her Ma-  
nagernent. This Practice obtains in the Paroxysms Of Inter-  
mittents; which, *for* the same Reason, we do not attempt to  
remove till the Heat he over. For it is equally absurd to he  
solicitous to take off the Heat, Thirst, Restleshess, and other  
Symptoms of these Fevers, as to think the *Gout* is to he cured  
by endeavouring only to abate the Symptoms, whereas the  
Cure is by this means obstructed and prolonged. For the more  
the Pain is eased, the more the Concoction of the Humours is  
prevented; and, in the same Degree, the Lameness is relieved,  
and the Expulsion of the morbific Matter is check'd. Again,  
the more the Violence of the Fit is suppressed, the longer it  
wifi last, and the shorter likewise the Interval will he between  
the Fits, and less free from every Degree of the Symptoms ac-  
companying this Disease; which will he acknowledged by any  
one who has attentively considered what we have delivered  
above, in our History os this Disease.

But though nothing considerable must he attempted in **the**Fit, excepting only, that those Symptoms are tu he relieved.

which an improper Method of Cure sometimes Occasions ; yet;  
as this Disease is unanimously held to arise from a Plenitude of  
Humours, it may not, perhaps, he amiss for the Patient to  
forbear Flesh for a few Days in the Beginning of the Fit, and  
instead of it to use Water-gruel, or some such Aliment; for  
such a flender Diet will greatly contribute towards lessening the  
Quantity of the morbific Mattes, and give Nature an. Oppor-  
tunity of digesting it sooner. But as Constitutions differ con-  
siderably, insomuch that some Persons cannot hear to abstain  
from Flesh, without being immediately seized with a Disturb-  
ance of the Spirits, Faintings, and other Symptoms of **the**hysteric Kind ; such therefore will receive Hurt by refraining  
from Flesh any longer than the Stomach is set against it, which,  
for the most part, ss only the first or second Day of those par-  
ticular Fits; all which, joined together, constitute the whole  
Fit, as we have intimated above. But whether the Patient  
eats Flesh sooner or inter, he must be equally cautious, both  
with respect to eating more, during the Fit, than is requisite  
to support Nature, and to the Quality os the Food. For great  
Care should be had to guard against every Error, either in **the**Quantity or Quality of the .Diet, both as to Solids and Liquids,  
eVen in the Intervals of the Fit, and especially in the Fit itself.  
And further, no littie regard is to be had, in the Intervals, **to  
the** rest of the Non-natuials, of which we have discoursed large-  
**ly** above; and though the Pain, and great Inability to Motion,  
may seem to contra-indicate Exercise, which I have principally \*  
recommended in this Distemper, the Labour must nevertheless  
he undertaken; for though the Patient may think himself ut-  
terly unable to bear to be carried into a Coach in the Begin-  
ning of the Fit, and much more so to abide the Motion of it ;  
yet, upon Trial, he will soon find himself more easy from such  
a Motion, than when he is at home in his Chair. Again, if this  
kind of Exercise he used Morning and Afternoon for some  
Hours; another Advantage attends it, winch is, that it causes  
**him** to rest a great.Part of the Night, which he could not do  
when he kept constantly within Doors; sor Very moderate Ex-  
erase fatigues a *gouty* Person so much, that he salis asleep.  
Besides, tins kind of Exercise is, in some Degree, preventive of  
the Stone, winch an idle and sedentary Life generally occasions.  
But the principal Advantage derivable from the constant Use of  
Exercise, is the preventing the Loss of Motion in theLunbs, winch  
seines several People after the first or second long Fit, occasioned  
by the Contraction of the Tendons of the Hamsand Heeis; for  
when the Pain has been so Violent, that they have lain still a long  
time, not caring to stretch out their Legs when it has attacked  
**the** Knees, they at last lose the Use of their Legs and Feet,  
for the Remainder of Life, both during the Intervals, and in  
the Fits, which nevertheless they do not escape. .Again, in  
aged People, whose Concoctions are considerably Vitiated, **and**who, through the long Continuance of the Disease, have the  
Substance of their Bodies, in a manner, changed into the *Gaus,*it is not to he expected, that the Disease can ever he brought  
**to** Digestion without Exercise; *for* when it exceeds the natural  
Strength, they frequently perish by Faintings and Sickness, oc-  
casioned by the copious morbific indigestible Matter; which,  
cannot he assimilated, and destroys them like Poison.

But notwithstanding what has been said of the Usefuiness of  
Exercise in the Paroxysms of the *Gont, yet, is the Fit* be **so**violent as to sink the Patient in the Beginning of it, (which  
happens chiefly in those Subjects in whom the *Gont* **is in the-**Height, and hath continued in that State for many Years) and  
confine him to his Room, it will he proper for him to keep his  
**Bed a** few Days, till **the** Pain abates, as the Warmth thereof  
will, in some measure, supply the Want of Exercise; for lying  
constantiy in Bed digests the morbid Matter more effectually  
in a sew Days, than sitting up does in many, especially in **the**Infancy of the Disease, provided the Patient can forbear Flesh  
without Faintings, and other had Symptoms, and be contented  
only with Water-gruel, small Beer, and the like. But it is  
well worth observing, that if the *Gont* he inveterate, and dis-  
poses **the** Patient *to* Faintings, Gripings, a Looseness, and **the**like Symptoms, he is in great Danger os heing destroyed by one  
of these Fits, unless he uses Exercise in a free and open Air y  
for abundance of *gouty* Persons have been carried off by these  
Symptoms, which they have been subject to from heing con-  
fined within Doors, and especially in Bed, who had lived longer,  
if they would have undergone the Fatigue of Riding in a Coach  
a great Part of the Day. For though a Person, who is afflict-  
ed only with a Pain of his Limbs, may keep his Room, yet  
another, who, instead of Violent Pain, is troubled with Sickness,  
and the other Symptoms above enumerated, cannot do the same,  
without endangering his Lise. And, in Effect, it is well sor **the**Patient, that there is no great Necessity for Motion or Exer-  
cife, **so** long as the Pain continues so severe, that he cannot  
hear it; his Life heing secured by the Pain, which is the salu-  
tary, though disagreeable Remedy of Nature.

But as to the Symptoms of the Gout, we are to relieve those  
which threaten Lise; the most frequent of which are the  
Weakness and Languor of the Stomach, with Gripings, as if  
occasioned by Wind; and these happen either to those who have

had the Gout many Years; or thofe, who, though they have  
not had it long, have nevertheless brought it Ort too hastily by  
quitting spirituous Liquors, on a sudden, for those which are  
thin and very cooling, or by applying repelling Plaisters, and  
other cooling Topics, to the Parts affected, to ease, the Pain 5  
whence the morbific Matter, which should have been deposit-  
ed on the Joints, is tranilated to the Viscera. I. heve tried se-  
veral Remedies in my Fits, of late Years, to relieve these Sym-  
ptoms ; but nothing did me so much Service as a small Draught  
os Canary, taken occasionally, as the Sickness and Faintness  
required. Neither red ***French*** Wine, ***Venice*** Treacle, or any  
other os 'the Cardiacs I am hitherto acquainted with; din so effi-  
cacious. But we are not to imagine, that Canary, or any  
other Cordial, can wholly secure the Patient without the Use  
of Exercise.

But if some violent Symptom comes on suddenly, from the  
striking in Os the gouty Matter, and threatens Lise, we are  
not to trust to the Wine or Exercise above commended ; but  
here, provided only the natural or vital Parts, and not the  
Head, he affected, we must have immediate recourse to Lau-  
danum, exhibiting twenty Drops of it in a small Draught of  
Plague-water, and the Patient most compose himself to Rest in  
Bed. . ' .

But if the gouty Matter occasions a Looseness for want of  
-heing tranilated to the Limbs, provided it be not the Crisis of  
***' a.*** particular Fit, and yields not to Laudanum and Exercise of  
all Kinds, (sor this is to be tried first in the Cure os a Loose-  
ness) but continues, attended with Sickness, Gripings, and  
ths like Symptoms, the only Remedy I know in this Case, is  
to raise a Sweat by a suitable Method, and proper Medicines ;  
and, if this be done every Morning and Night, for two or  
three Days together, keeping it up two or three Hours at a  
time, it generally, checks the Looseness, and forces the morbi-  
fic Matter to the Limbs. To this Method I owe my Recovery  
from this Disease some Years since, (winch I had imprudently  
occasioned by drinking cold Water for my common Drink)  
after having used Cardises and-Astringents of Various Kinds to  
no Purpose. . !,

There is another Symptom, which I have often seen, though  
it is not so common, which is a Translation of the peccant  
' Matter to the Lungs by a Cough ‘in the Winter-season, occa-  
sioned by taking Cold in the Fit, which, by Degrees, inVites  
the Matter to those Parts; the Joints, the mean while, heing  
in great part, or totally, freed from the Pain and Swelling, by  
the Tranflation of the morbid Matter to another.Part. In this  
single Case, the curative Indication is not to he levelled at the  
***Gout*** 5 but this Symptom is to be treated like a true Peripneu-  
mony ; that is, by repeated Bleeding, and cooling and incrase  
fating Medicines -and Regimen, as the Blood winch is taken  
away, exactly resembles that of Pleuritic Persons. The Pa-  
tient likewise should he gentiy purged in the Intervals of Bleed-  
ing, to carry off the Matter that is lodged in the Lungs. Bur  
.Sweating, how effectual soever it may be in forcing the morbific  
Matter upon the Limbs, proves detrimental in this Case, by  
hardening the Matter that is forced, upon the Lungs ; whence  
proceed small Abscesses, and in the End, certain Death. ***See***Musgrave's ***Sentiments on this, below.***

It is farther to he remarked, that most ***gouty*** People, aster  
the Disease has heen of long Standing, become subject to the  
Stone in the Kidneys, and are generally seized with Nephritic  
Pains, either at the Height, or more frequentiy at the Decfine,  
of the Cardinal Fit, which are Very severe, and weaken the  
Patient considerably, who was too much debilitated and ex-  
hausted by the preceding Distemper. In this Case, omitting  
all other Remedies, let him immediately drink a Gallon of  
Posset-drink, in which two Ounces of Marshmallow-roots  
have been boiled, and inject the following Clyster: .

Take of the Roots of Marshmallows, and white Lilies, of  
each an Ounce; the Leaves of. Ki allows, Pellitoryof the  
Wall, Bears-breech, and Charnomile-flowers, of each one  
Handful; Linseed and Fenugreek-seed, of each half an  
Ounce; host .them together in a sufficient Quantity of  
Water to a Pint and an half; dissolve in the strained Li-  
tjustr brown Sugar, and Syrup of Marshmallows, of each  
two Ounces; mix the Whole for a Clyster:

As soon as the Poffet-drink is ejected by vomit, and the  
Clyster come away, exhibit twenty-five Drops of ***Liquid Lau-  
. danurn,*** or fifteen Grains ***of Matthew’s Pills.***

If outward Applications be inquired after to ease the Pain in  
the Gout, I know of none, (though Ἰ have tried abundance,  
both in myself and others) besides Coolers and Repellents, which  
**I** have already shewn to be unsafe. And I scruple not to affirm,  
from a long Course of Experience, that most of those who are  
. supposed, to perish by the ***Gont,*** are rather destroyed by wrong  
Management, than by the Disease itself. \_ But if any one be  
desirous'of trying the Efficacy of fuch external Medicines as  
are esteemed certain Anodynes, to orevent being mistaken, in-

stead of applying them at the Declension of a particular Fit,  
when the Pain is just going off spontaneously, let them he used  
in the Beginning, and he will soon he convinced os their insig-  
nificancy, and the Groundlefness os his Expectation, as they  
sornetimes do Mischief, but can never do Service.

For this Reason I have laid aside the Use ofTopicsfor several  
Years.; but I found most Benefit formerly from a Cataplasm,  
made of white Bread and Saffron boiled in Milk, with the Ad-  
dition afterwards of a small Quantity of Oil os Rosas; which,  
however, did notat all relieve me in the Beginning os the Fin  
Is therefore the Pain be extremely severe- the Patient had better  
keep in Bed till it abates.a littie, than to heve recourse to Ano-  
dynes ; but however,’ it will bo proper, if the Pain be very vio-  
lent, to take a Dose os Laudanum in the Evening, otherwise  
it is better omitted. ; . .. - .

But now I am treating of external Applications, I must fay  
something os a. certain ***Indian*** Moss, intituled ***Μοχα,*** which  
is highly esteemed of late in the Cure of the ***Gout-,*** the  
manner of using it being to bum. a small Quantity of it upon  
the Part affected..: Now, though this Remedy is said to  
come from the. ***East-Indies,*** and to heve been unknown to the  
***Europeans*** till of late Years, it will nevertheless appear to be  
os more antient Date with us, by consulting the Writings of  
***Hippocrates,*** compiled above two thousand Years ago. Treat-  
ing of the Sciatica, he advises, " ***If the Purin be sued in  
or any one Part, and does not yield to Medicines, in whatever  
“Part it be, to burn it with raw Flax***; " and a little farther,  
speaking of the Gout .in the Feet, he says, " ***The some Things  
" are proper here, that da Service dn the*** Gout ***of the sicents ;  
" and indeed, this is a long and painful, but not a mortal Disc  
(i ease: If the Pain, however, continue in the Fingers, burn  
" the Feins above the Joints with raw Flax.”*** Now, I am of  
Opinion, that ho one can imagine, that there is such a Specific  
Difference betwixt the Flame of burning Flax, and .that of  
***Indian*** Moss, as to render the latter more effectual in the Cure  
of the Gout than the former, any more than he can suppose,  
that a Fire made with Oak Billets can do more than another  
made os Ash. This Burning of the Part affected bids fair to  
ease the Pain, and may sometimes effect it, the most subtile  
and spirituous Part of the morbific Matter deposited on the  
.Part being by this means expelled. But the Relief hereby ob-  
tained must necessarily be - of short Duration, because it does  
inot at all amend the Indigestion, which is the antecedent Cause  
of. the ***Gout***; and it seems superfluous to observe, that it is to be  
used only in the Beginning of this Disease. For when the  
***Gont,*** either on account of its long Continuance,-or through  
wrong Management, retreats to the internal Parts, which- some-  
times happens, and instead of Pain causes Sickness, ‘ Gripings,  
and Abundance of the like Symptoms, no judicious Person will  
the for ufing Fire. See MOXA.

And now I heve delivered all that I have hitherto discovered  
concerning the Cure of this Disease ; but if it he objected,  
that there are many specific Remedies for the ***Gout,*** I freely  
own I know none; and fear that those who boast of such  
Medicines are as ignorant as myself. And, in Effect, it is to  
the regretted, that the excellent Art of Medicine should be so  
-much disgraced by such Trifles, which the Credulous are de-  
chived with, either through the Ignorance or Knavery of Au-  
thors ; Remedies of this Kind heing extravagantly magnified in  
most Diseases by those who offer them to Sale. ***Sydenham.***

Before I proceed to ***Mus.gravPs*** Account of the ***Anomalous  
Gout,*** I. must specify \* the Preparation of some Remedies he  
.frequentiy refers ***to. The*** first of these is what he calls

**ALCOHOL MARTIS.**

... Put ten Pounds of the Filings of Steel into a Pan, or glazed  
Earthen Vessel; moisten them with human Urine, then

-.:r dry them, either by the Heat of the San, or that os the  
. . . Fine; then moisten them again with the same Liquor,  
d stirring the Particles twice a Day with an Iron Spatula to  
prevent their Coalescence; continue this till the whole  
Mass is reduced, aS it were, to Rust ; when it is so, pound  
it in an Iron Mortar. When ’tis pounded, throw it into  
a Vessel in which there are about four Gallons of Spring-  
water ; mix the Powder with the Water. About a quarter  
inf an Hour aster, gentiy draw off the uppermost and  
least turbid Part of the Water, and evaporate it till the  
Powder swimming in it is lest dry. Let the Liquor also  
left in the Vessel he evaporated in like manner. Let the  
grosser Powder in the Bottom he moistened with Urine,  
and managed in the same manner aS ar first. Let the Nu-  
trition, Trituration, and Separation by Water, he thus  
continued, till the Whole of the Iron is reduced to a Very  
fine Powder. Put this Powder, when dry, into a Piece  
of coarse Paper wrapt up in the Form of A Conery pour  
upon it by little and little, and at different times, warm  
Spring-water, till the urinous Salt being quite washed away,

. an inlipid Water strops through rhe Paper; then dry the  
Powder again, and keep it for Use. ' ‘

This most subtle Rust of Steel is a mere *Alcohol* of uncom-  
mon Efficacy, not only in the Gout, but also in most other  
chronical Disorders, especially if the Panents are of weakly  
and tender Constitutions.

The Dose is hast a Scruple, either once or twice a Day, as  
the Circumstances of the Patient seem to require.

**PULvrs RUBBR ExoNIBNsIS.**

. Take of the Tops of Pimpernel, Scabious, Dragons, Be-  
tony. Germander, and Tormentil, each four Ounces;  
mix them together, and cut them. Digest for twenty-  
sour Houts in a Sand-heat, in four Pounds of white Port  
Wine, the Glafs in the mean dme being well stopped;  
then strain off, and make an Expression.

Then take of the Powder of *Armenian* Bole, one Pound; with  
the aforesaid infusion let it he reduced to the Consistence of  
a Liniment; shake it often, then moisten it again with the  
Infusion. Thus let the Mass be nourished or moistened  
with the Infusion; hut along with the last half Pound of **the**infusion, let there be added to the Mass one Ounce of Mi-  
thridate, one Ounce and an half of Diafcordium, Confection  
of Kermes, and Powder of Turmeric-root, each half an  
Ounce; *Virginian* Snake-rcct, and *Engiist* Saffron, each  
two Drams. Mix all together, and dry the Whole : make  
into Troches, or little Cakes, to be hardened in the Heat  
of the Sun. and preserved for Use. The Dose is from  
one Scruple to one and an half, or two Scruples.

**AQUA HISPANORUM ARTHRITICA.**

The *Spani/h Gout Wolter,* as’tis called, is by some highly  
esteemed, and is indeed of very great Efficacy ; ’tis prepared in  
-the following manner:

Take *of Cloves,* Nutmegs, Ginger, Mace, Cinnamon,  
Black Pepper, Saffron, Zedoary, Galangals, Juniper-  
berries, Citron and Orange-peel, Spikenard, Cubebs,  
Hepatic Aloes, Wood of Aloes, Sweet Flag, and Stce-  
chas, each half an Ounce; Tops of Sage, Basil, Rose-  
mary, Mint, Marjoram, of common Bay-berries, Peny-  
royal. Shavings of Gentian, Elder-flowers, White and  
Red Roses, Ground-pine, Germander, Calamint, Baum,  
Origanum, and Feverfew, each two Handfuls ., of Figs,  
Dates, Bitter Almonds, Pine-nut Kernels, and Raisins of  
the Sun, each six Ounces; of Virgin Honey, one Pound;  
of the finest Sugar, one Pound; and grated Musk, one  
Dram. When these Ingredients are cut and bruised, let  
them be put into fifteen Pounds of the best Canary Wine  
to infuse for ten or twelve Days, then distil in Baineo  
Marrae.

This Water is esteemed of uncommon Efficacy in Arthrinc  
Disorders *of* the Stomach and Intestines. The Dofe is bass an  
Ounce, to he taken with a little Sugar or Crumb of Bread; it  
.maybe repeated at Pleasure. It is also used externally for remove-  
. rng arthrinc Pains of the Joints; and the Method of applying  
it is, to make it very warm, and then embrocate the Part affects  
ed with it.

*From* **MUSGRAVE.**

Whilst the ArthriticMheter is deposited upon the Extremities,  
particularly the Joints, and remains there without any Danger  
of returning. Nature is pursuing her Purpose, and defending  
herself from the Danger the would he in from a Retrocession  
of the Gout, and its fixing upon any Part of the Trunk.

These anomalous Symptoms of the Gout, when they appear  
. before the Patient has had a Fit regularly, are very difficult to  
he distinguished from other Diseases, which the Part where it  
fixes, is subjecti to. And therefore *Mujgrave* says, ’tis mi-  
possible to know anomalous Symptoms os the Gout, without a  
previous Fit.

The Arthritis Vaga is attended with Pain, and sometimes  
- with a white Swelling, like an (Edema.

Those who have the regular Gout, **heve** seldom, **unless** by  
: Accident, any other great Disorder,

., The anomalous Gout visits most frequently the Stomach and  
. Intestines; whence arise Loss of Appetite, and bad Digestion,  
Vomiting, Colic, Dysentery, Diarrhoea, and sometimes Ar-  
. thritic Abscesses.

Sometimes it seizes the Head, and causes a Cephalalgia, Ver-  
tigo, or Apoplexy, and sometimes seining the Nerves, «uses  
a Palsy.

It often fixes upon the Organs of Respiration, and causes  
. an Asthma, Cough, Hsmoptoe, and Phthisis.

Sometimes it appears in the Shape of an Annina.

At fome times it seines the Gums, and is called *Dentium  
Podagra,* improperly.

- At other times it seizes upon the Kidneys, and causes the  
Stone, Dysury, and Strangury.

No Part of the Body is free from is.

The natural or acquired Weakness of any of the Vifcera,  
**or** internal Parts, is the Cause of the *Goafs* fining upon  
them.

Whatever repels **the** *Gout* from the Extremities, as Cata-  
plasms, Pleisters, *etc.* causes it to six upon the Viscera.

The Symptoms os the Anomalous Gout differ exceedingly,  
as they happen to fix upon different Parts, causing in Appear-  
ance different Distempers.

They also differ, as the Matter is sometimes purely gouty,  
and sometimes has with it a Mixture Of some other Distemper,  
as Scrophula, Scurvy, or the like. - ,

The Anomalous Gout is driven into the Extremities from  
some Parts much more easily than from others. From the Fauces  
it removes without muchTrouble, and almost of its own Accord.  
On the contrary, it is removed from the Nerves with the utmost  
Difficulty.

Too tight Shoes are sometimes the Cause of the Gout’s  
leaving the Extremities, and fining on the Viscera.

Those things which evacuate the gouty Matter, tho’ some-  
times absolutely necessary, yet seldom cure the Distemper, but  
are even prejudicial when improperly used. But the Cure of  
the Distemper can be no otherwise completed, then by an Ex-  
pulsion of the Gout into the Extremities,

Those Medicines which expel the gouty Matter, and drive  
it upon the Extremities, are taken from the Classes of Cardiacs  
and Diaphoretics, amongst which are the following i

Powders of Zedoary, Contrayerva, Gentian, *Virginian*Snake-root, *Gafcoiguls* Powder, the Pulvis Purpureus of *Bates,*Goa Stone, Contrayerva Stone, Species Diambrz, Confectio  
Liherans; the Pulvis Alekipharmacus, and Pulvis Stomachicus  
Amarus, of *Fuller* ; the Pulvis Bezoarticus of *Wollis*the Pul-  
vis Ruber Exonienfis; **the** Flowers of Sal Ammoniac, and  
others of the fame Kind, .. .

*Vmice* Treacle, Mrthndate, the Elechuarium de Ovo.

Spirit of Hartshorn, either simple or fuccinated ; Spirits of  
human Blond, of Urine, of Silk, and Sal Volatlle Ole-  
osum.

- Amongst Wines; the most effectiial are *French* White-wine,  
Champaign, Mosel, Rhenish, Burgundy, Bourdeaux, Portu,  
guese Wines, to which may he added subacid Cyder.

As *cents* Patients are generally forbid the Use of some of  
thefe Wines, it may feem extraordinary to fircti, thatd/asc.  
*grave* should recommend them. But it must be .considered,  
thet they are directed to abstain from such Wines, becaofe they  
promote Fits of the *Gout* ; with which View *Mujgrave* recom-  
mends them, in order to render an anomalous *Gout* regular in  
the Extremities.

But of all Remedies, *Mujgrave* thinks nothing so powerful  
as Steel, the best Preparation of which is, the *Alcohol Martis*above defcrihed.

If, after the Use of these Medicines for four, or five Days,  
no Pain is perceived in the Extremities, we must then proceed  
to such external Applications, as invite the *arthritic* Matter  
downwards. Therefore apply to the Part, which used to he  
pained in Fits of the *Gout,* a Plaister of Gum Caranna, or  
thet called *Qxycroceurn*; or the Cephalic Plaister, with one half,  
a third, or a fourth of *Burgundy* Pitchi

Urtication *(whipring with Nettles)* is of Use, which was  
much practised by the Antients; as also extremely hot Baths,  
and the Skins os Animals just taken off, and Oil Caso

In Cases of extreme Danger, where the Strength of the Pa-  
' oent can bear it, such a *Phanigmus* as the following may he  
of great Usis:

Take of old Barm, two Parts; of Mustard-seed, Horse-  
radish, Garlick, the Tops of Rue, and Pigeons-dung, of  
each equal Parts ;\*beat up these to the Consistence **of a**Cataplastn, with sharp Whire-wine Vinegar.

Part of this is to he applied, as hot as the Patient can beat  
it, and the Part must he covered with Flaneis, or the Cata-  
plasms may he spread on Flaneis, and applied, renewing it  
when it grows cold, till it causes a Tumor. Meantime, if the  
Patient is low, or faint, through Excess of Pain, he should  
have a Cardiac Julep, or a Glass of generous Wine, which is  
much better. When a Tumor is formed, an Epifpastlo must  
be applied to let out the contain’d Matter, lest otherwise it should  
return into the Blood.

When there is no Necessity for immediate Help, and the  
Patient is weak, tender, or impatient of Pain, a. common Epi-  
fpastic should he applied to the Legs, or Cubit, according as the  
*Gout* used to verge towards the upper or lower Parts ; and, this  
bring taken off twelve or eighteen Hours after, the following  
Plaister must he applied to continue the Running:

Take of Hog’s Lard two Drams and art half; of Melilot  
Plaister, a Dram and an half ; Powder of Cantharides, a.  
Dram.

By this means the Running should he continu’d six, eight, or  
ten Days, according to the Circumstances of the Case.

Either of these Proceedings generally relieves the *Goul* in a  
few Days. Mean time the Matter discharg'd is so salt, that  
it makes the adjacent Parts itch, and sometimes inflames them.  
When this Ichor is evacuated, the Symptoms generally are  
relieved, and the Patient gets hearty, and recovers his Appe-  
tite and Spirits, and for some time is free from another Fit of  
the *Gout. }*

*: Mus.grave* is of Opinion, that the most dangerous thing a  
Person long afflicted with the *Gout,* and us'd to a free Way  
of living, can attempt, is to endeavour to conquer it by Abs-  
tinence.

*Of the* **GOUT** *in the* **STOMACH.**

As the primigenia! *Gout* is often caused by Indigestion, and  
Weakness os the Stomach, so no Part is so often, or so much,  
afflicted with the anomalous *Gout.*

This Facility to receive and retain-the *Gout,* is often owing  
to a connate Imbecillity ; and sometimes to a Weakness con-  
tracted from too much Venery, Grief, Fear, or any other  
relaxing Passion of the Mind, by which Imbecillity the Stomach  
becomes more liable to receive, and less capable to repel, the  
*arthritic* Matter. \* .

But it very frequently happens; that the *Gout* is invited into  
the Stomach by crude, acid, bilious, or some other vicious  
Juices contain'd therein, which stimulate the Coats thereof;  
and this happens just for the same Reasons that Sinapisms and  
EpispasticS invite it to the Extremities.

Sometimes external repelling Cataplasins or Plaisters, apply'd  
injudiciousiv to the Extremities, are the Cause of the *Gout’s*fixing in the Stomach. External Cold has the same Effect,  
either from the Ain or Bathe, dur

When the *Gout* has been for some time regular, and the  
Patient has had many Accessions and Recessions in the Extre-  
mities at Intervals, we often see the Fit shorten'd, or broken  
off, unexpectedly, by means of Cold, repelling Plaisters, Ca-  
la plasms, or Unguents ; or else by a Debauch, overloading  
the Stomach, or some Error in point of Diet ; or else the In-  
tertal has heen longer than usual, and the Paroxysm has been  
deferred longer than was consistent with Health.

This Interruption or Intermission of the *Gout* is often fol-  
low'd by Loss of Appetite, and loathing of Fond ; to which  
afterward a Weight in the Breast is joined, and then Eructa-  
dons. Vomiting, and Heart-burn. To these frequently are  
join'd an Oppression of the Intestines, with Pain, Constriction,  
and sometimes Heat ; an interrupted and streight Respiration ;  
frequent Oscitation, .(*Yawning}* Head-ach, Vertigo, and  
sometimes Dejectedness; frequent and sudden Dimness of Sight,  
Paleness of the lFace, and, after some time, an universal Im-  
becillity and Leanness. .

These Symptoms, perhaps, never appear all at the same  
time, in the same Person, but frequently a great many of  
.them. \*

From the Time that these internal Symptoms appear, there  
is littie or no *Gont* in the Extremities. The Patient, who be-  
fore was confin'd to his Bed, can now get up and walk about  
with great Eafe. Mean time, the internal Complaints grow  
daily worse and worse; and the Patient, worn out with want  
of rood. Languors, and Pain, after some Months miserably  
spent, dies, unless the Weather changing from immoderately  
cold, to warm and mild, or proper Medicines, restore a regu-  
lar Fit of the *Gont.*

This *Gont* in the Stomach afflicts old People most frequent-  
ly ; however, young People often have it, probably, from  
. their Careleshess and Licentiousness in point of Diet, hecause  
these generally sail into it, immediately after an Error in  
either Eating or Drinking.

Tho' this Distemper happens at any time of the Year, yet  
’tis most frequent in Autumn, which may he owing, in some  
measure, to Fruits eaten at that Season, and lying in a State of  
Putrefaction in the intestinal Tube.

Sometimes these Symptoms will happen, without any Cause  
so evident as is above specify'd ; sometimes with a regular Fit;  
and sometimes at a. greater Distance from its Interruption.

Sometimes old People, now grown sober and abstemious, but  
who have drank hard, and lived freely in then Youth, are sub-  
ject to Hypochondriacal Disorders, which are somewhat like  
*gouty* Symptoms, as perpetual Languors, Eructations, Anxie-  
ties, Dejectedness, sometimes Pain, and other Disorders of the  
Stomach. Now, in order to enable us to distinguish these from  
the Gout, we are to weigh the Circumstances attending, as the  
Manner in which they seize the Patiens, their Vchemence, and  
the Intervals, and then the Case will be pretty plain.

It makes no Difference in these Cafes, whether the *Gout,*leaving the Intestines, goes directly into the Stomach; or whether

it takes a round-aboutWay, fazing first the Fauces, some con-  
tus'd Part, or any other Place ; nor whether it immediately  
follows the fix'd or erratic *Gout.'*

- It is further observable, that such as have an hereditary *Gout,*are more subject to these Disorders than others ; those who are  
hern of old Parents, than those hern of young ones ; those  
who have a badAppetite, than these who enjoy a good one ;  
those who have a languid, cold *Gout,* than tnose who have a  
het, sharp, and painful one.

*The* **C U R E.**

The Curative Indication is to relieve, as soon as safely  
may be, the Stomach, and to free it from the *Gout:* And, in  
order to this, two things are requisite:

First, To remove all Impurities from the Stomach, which  
attract and detain the Gout in its Coats, by proper Vomits or  
Purges.

Secondly, After this is done, or omitted, if not necessary, to  
drive the Gout from the Stomach into the Extremities. -

If a Shortness, or Difficulty in Breathing, a Gravity and In-  
flation of the Stomach, and particularly an Eructation, Nausea,  
or Vomiting, are troublesome, a gentle, but effectual Vomit  
will be necessary ; provided the Patient has sufficient Strength,  
and there are no Reasons to the contrary.

. A great deal of Cantion is necessary in making Choice of a  
proper Emetic ; for, on the one hand, those which are too lan-  
guid to operate well, are trifling; and, on the other, those .  
which operate with too much Violence, are dangerous.

For such as Vomit easily, an Infusion os green Tea-leaves,  
or the Tops of Carduus Benedictus, is sufficient, drank so as to  
Vomit sour; five, or six times, and in the Quantity of eight,  
ten, or twelve Pints in the Whole, .if the Patient can bear  
it.

Those who are not sufficiently affected by this sort of Vomit,  
should take a proper Quantity of Salt of Vitriol in every, every  
other, or every third Pint of the Infusion.

Those who Vomit with more Difficulty, should take Wine,  
or Oxymel of Squilis, or equal Parts of both, in the Quantity  
of two or three Ounces together; and, half an Hour after  
taking it, should work it off with some simple or bitter Posset-  
drink.

But those who either cannot, or will not, drink a sufficient  
Quantity of Posset-drink, warm Water, or some other Liquid,  
should never take any officinal Emetic; for, by this means,- '  
there would he a great Quantity of Humours invited into the  
Stomach, and none discharg'd out of it, which would injure  
the Patient.

Sometimes neither Posset-drinks, Decoctions, nor any other  
Medicines of this Kind, can safely he given the Patient, be-  
cause they give him Violent Gripes and Spasms, especially Hard-  
drinkers.

The Reason of this seems to be, because they are too cold  
for the Stomach. ' :

in this Case *Mus.grave* says he has saved many Patients  
from the Jaws of Death, by giving Quantities of Wine as an  
Emetic, but which is, at the same time, a good Cardiac.

The Matter evacuated by Vomit is sometimes bilious, some-  
times crude, especially after a Debauch of Eating or Drink-  
ing.

The good Effects of a Vomit appear in an Amendment of  
Respiration, and a Removal of the Gravity of the Breast.

And sometimes it happens, that the Very Efforts of Vomit-  
Ing, and the Agitation of the Blood caus'd thereby, drive the  
*Gout* from the Stomach, and It immediately salis on the Ex-  
tremities.

An Hour after the Vomit, especially if promoted by any of  
the Officinals, a Clyster should he administer'd, in order to  
cany the Remains of it out os the Intestines ; and at Night a  
Bolus, with *Fenice-treacle,* and *the Countefs of* Kent's *Powder, .*with a Draught of burnt Wine, should he exhibited. After -  
this, let the Patient take, three or four times a Day, a Draught  
of bitter Wine, with a Scruple or half a Dram os the Coun-  
tess of *Kent's* Powder, till it is time to purge him.

After one Day's Interval from the Vomit, provided the Pa-  
tient has sufficient Strength, he should be purged. But in ease  
of too great Weakness, this should he deserr'd a littie ; how-  
ever, as soon as possible, a Purge should he given, such a one  
as will sufficientiy clear the Intestines, without causing a Hy-  
.percatharsis : For 'tis a certain Rule, that the Cure of this  
anomalous Gout is most likely to succeed, if 'tis begun *by*clearing the Stomach and Intestines.

Proper Purges on this Occasion are.

*Tinctura Sacra,* in the Quantity of three or sour Ounces.  
*Pill Rudii* ; Dofe half a Dram, or two Scruples.

*Earl of WanuicP s Powder* ; Dose about half a Dram.

*Manna* and *Salts* dissolved with an Addition of *Daffy's  
Elixir.*

If the Purge does not operato in six Hours, It will he proper  
to give a Clyster.

At Night, let the Patient take such a Bolus as after the.  
Vomit.. . . . . .

Sometimes it happens, that after even sufficient Vomiting  
and Purging, a troublesome Nausea remains, insomuch that  
all Medicines are thrown off the Stomach, aS soon as taken, by  
Vomits This is probably caused by the Arthritic Matter lodg'd  
in the Coats of the Stomach. In order to prevent this, ex-  
hibit about ten Drops of *Liquid Laudanum,* in two Drams of  
*strong. Cinnamon* or *Wormwood-vvater,* or *Spirit of Mint,*every fourth, fifth, or sixth Hour ; that is, in such a Dose,  
and at such Intervals, aS will stop the Vomiting, and give the  
Stomach Power to retain the Medicines destin'd to expel the  
*Gout,* which should be given in the Intervals hetwixt the Do-  
ses of *Laudanum ..* For Example, if the *Laudanum* is given at  
six and twelve, the other Medicines should be administer'd at  
three and nine. As soon aS there is no farther Occasion for  
the *Laudanum.,* is must he omitted, being then prejudicial.

What has been hitherto said about Evacuations, must be un-  
derstood os such as have Occasion for both Vomiting and Purg-  
ing, and Strength sufficient to bear it: But when there is no  
Occasion for it, as it happens when this anomalous Gout is  
brought upon the Stomach by Grief, or when there is a Defi-  
ciency of Strength, we must begin with Medicines that drive ‘  
the *Gout* from the Stomach, omitting these Evacuations.

Steel has a peculiar Excellence in driving the Gout from  
the Stomach. r.

*Mus.grave* recommends the following Forms :

Take either of *Gaseoigofs Powder,* or the *Pulvis Purpureus,*or *Goa Stone,* or the *Pulvis Ruber Exoniensis,* a Scruple,  
or half a Dram ; of *Virginian* Snake-root, ten Grains ;  
*Alcohol Martis,* five Grains. Mix and make a Powder.

Instead of Virginia Snake-root, Gentian, Zedoary, or Con-  
trayerva-root may he used in the same or a larger Quantity.

Take of the.compound Amm-powder, and PulVis Ruber  
Exoniensis, each a Scruple ; Alcohol Martis, five Grains.  
Make a Powder. Or,

Take of Species Diambrae, (or *Aromaticum Rofatum)* and  
Gascoign'S Powder, a Scruple, or half a Dram , Alcohol  
Martis, five Grains.’ Mix and make a Powder. ’ Or,

Take of Ginger candy'd in the *Indies,* a Scruple (or *Pods  
of Peppcr eands.d,* six Grains) ; Pulvis Purpureus, a  
Scruple, or half a Dram.; Alcohol Martis, five Grains;  
Syrup os Wormwood, a sufficient Quantity to make a  
Bolus. Or,. , . ..

. Take of Species Diambrae, and Lapis Contrayerva, in Pow-  
. der, each a Scruple , Alcohol Martis, five Grains ; Con-  
fection *os* Kermes, enough to make a Bolus. Or,

Take of the Species call'd Aromaticum Rosatum, (or *Dian-  
thos.)* two Scruples; Flowers, of Sal Ammoniac, ten  
Grains ; Syrup of Cloves, enough to make a Bolus. Or,.

Take of the Conserve of *Raman* Wormwood and Gascoign’S  
Powder, each a Scruple; Oil of Caraway-seeds, one  
Drop ; Alcohol Martis, five Grains; Syrup of Citron-  
peel, enough to make a Bolus. Or,

Take os *Fenice* Treacle, (or *Mithridate,* or the *Electuarium  
Stomachicum* of *Fuller)* and of Gasooign’s Powder, each a  
Scruple.; Alcohol Martis,, five Grains; Syrup of Mint,  
enough to make a Bolus. Or,

Take of Camphine, five Grains , of the Powder of Contra-  
yerva-root, fifteen Grains ; of the Extract of Rue, a  
sufficient Quantity. Form into Pilis. Or, .

Take of the Powder of Long-pepper (or of theSpeciesDin/rAn  
*Piperesm.* five Grains ; Gentian Powder, haff a Scruple.;  
Myrrh, five GrainsExtract of the lesser Centaury, a  
sufficient Quantity. Form into Pills. Or, . ..

Take of the Powder of *Virginian* Snake-root, one Scruple  
of Alcohol Martis, five Grains ; of Syrup of Oranges, a  
sufficient ^Quantity.' Form into Pilis, τ

With every Bolus, or Dose of the Powder or Pilis, a  
Draught osthe followingJulap is to be taken

Take of the Waters of Carduus, Mint, Alexiterial Milk-  
water, cornpound Gentian-water, compound Wormwood-  
’ - Meters 6r strong Cinnamon-water, each sour Ounces ;

prepar’d Pearls, two Scruples ; Sugar, a sufficient Quan-  
tity. Make into a Julap. ’

The Chymical. Oils incorporated with the Julap, by means  
Of Sugar, render, it much more efficacious than it would other-  
wise be. Tor.5- liquid Form I recommend the following In-  
'fusions.^- ......

Take of Zedoary-root, os Gentian, of the Tops of *Roman*Wormwood, of Agrimony, or Marsh-trefoil, eaoh twO

Drains Cochineal, one Scruple ; Orange-pill,' two  
Scruples. Infuse in two Pounds of Red Port Wine, or  
Spanish Wine, till the Wine is sufficiently impregnated.  
Then strain off for Use. The Dose is two or three  
Ounces. ' , '

After the same manner Infusions may be prepar'd from other  
Aromatics, as the Cortex Winteranus, Cubebs, the Seeds of  
Cardamoms, Anise, Caraway, sweet Fennil, and Scurvy-  
grass. . ... -

Every Draught of bitter or aromatic Wine should have ten.  
Drops os Tincture os Steel, or else *Alcohol Martis taken*with it.

The Poor may readily heve an Infusion os Garlick, Saffron,  
Ginger rasp'd, with the Tops os Roman Wormwood.

It sometimes, happens that the.Patient cannot take Medicines  
in any solid Form, or by way os Infusion ; and in this Case  
*Spirit of Mint,* Juniper, or Wormwood, may be both use-  
ful and serviceable. -The Aqua Hispanorum Arthritica is much  
esteemed by some, the Preparation os which see above.

Aster sufficient Purging, *Mufgragie* recommends the Use of  
the above described Medicines, or the like, in the following,  
manner. ’ . - -

In the Morning, about Nine, a Draught of bitter Wine.

At Three in the Afternoon, Pilis or Powders.

At Nine in the Evening, a Bolus, especially that with Ve-  
nice-treacle.

' At Three in the Morning, Powder or Pilis.

The Patient must drink, aster every Dose of each, a Draught  
of Port Wine, or of some proper Julap.

Sometimes it happens, that in two or three Days, by the  
Use of these Remedies given after this manner, the Gout is  
driven from the Stomach, and fixes upon the Joints. Some-  
times this is not done without a long Perseverance ; and some-  
times not without other Remedies call'd in to our Assistance.

If, after persisting in the. Use of these Medicines for two  
Days, no Pain or Tumor appears, it will then be prudent to  
apply to the Part where the *Gout* ufed formerly to fix, the  
Cephalic Plaister, with equal Parts of Burgundy Pitch ; or the  
Green Cerate ; or else a Blister to each Cubit or Leg, to in-  
Vite the Humour downwards. -

' If these external and internal Remedies are not sufficient,  
with united Forces, to remove the Gout from the Stomach,  
the Strength of one or both must be increased, and other Aids  
must be called in, if necessary. The Dose, for Example, *of  
the Alcohol Martis* must be increased to ten Grains, and the  
Tincture of Steel to twenty Drops. ........

1 Moreover, every intermediate Hour betwixt the Doses of  
Medicines, let the Patient drink a Glass of Port Wine, so as  
to drink two or three Pints in twenty-four Hours, reckoning  
also whet is taken with the Medicines. But this is principally -  
serviceable to those who heve used themselves to drink Quan-  
tities of Wine, and cannot well do without it. „

Those who cannot drink such (Quantities os Wine,' should  
take some Drops of succinated Spirit of Hartshorn in a proper  
Julap, at the intermediate Hours.

Finally, the Use of these Medicines and Wine should be  
-continued, till a Heat and Orgasm is raised in the Blood, and  
the Stomach is relieved, unless there should he some great Rea- .  
son to discontinue them sooner.

At the same time, the Force os the internal Applications  
should be increased, and that till *tspsC gouty* Humour is expell’d,  
and a Tumor is raised in some external Part, proper to receive  
the *Gout.* For this purpose, the Extremities may be wrapp'd  
in a Sheep-ikin just taken off

But nothing answers the End surer or sooner, than an acrid  
and stimulating *Phcenigmus* apply'd very hot to a proper Part,  
and renew'd as it grows cool, whilst the Tumor is rising.

Those who are too nice to bear the Smell os a Sheep-ikin,  
or too tender to bear the Pain of the *Phcenigmus,* may use a  
hot Brick or Plate os Iron, wrapt up in Linen, and apply'd to  
the Part. ' ... .

During the. whole Course os this Method, the Patient should  
keep in Bed, or in his Chamber, ' and guard particularly against  
Cold. ,

Mean time let the Patient eat Panada, Jelly of Hartshorn, or  
Chicken-broth, or some such Food which is thin and easy of  
Digestion.

If the Pain thus raised should he so intolerable as to cause  
a Lipothymia, something of the Force of Medicines, and sti-  
mulating Applications, may be abated.

If the Fever should run too inch, the Dose of the Cardiacs  
should be lessen'd, or they should be entirely omitted. Let  
‘the Patient drink as much white Decoction as he pleases, to  
temperate his Heat.

As soon as a sufficient Orgasm is excited in the Blood, the  
gouty Matter generally sixes where the external Applications  
invite it, upon the Extremities; insomuch, that sometimes in

\* an Hour's Time aster the Application of rhe. Phcenigmus, a  
Tumor will appear.

*s »*. Mean time, such a Fomentation as the following should  
he apply'd to the Abdomen twice or three times a Day, by  
means os fianel St.uphs.

Take os the Tops of common Wormwood, Mint, Red  
Rose-leaves, and Chamomile-flowers, each half an Ounce ;  
Of Anise and Caraway-seeds, each two Drams ; . Powder  
of Cinnamon, Cuhebs, and Cloves, each one Scruple ;  
common Spiryt of Wine,, half a Pound ; of Red Port  
Wine, one Pint and an half.. Let them macerate for,  
three or four Honrs in a well-stopt Glass plac'd in *Balneo  
Maria.* Let the strain’d Liquor he apply'd as hot as  
possible. Or, let such a Plaister as this be worn con-  
stantly on the Abdomen. , .

Take of Japan Earth, Balsain of Chili or Peru, each half a  
Dram ; Gum Galbanum, a Dram ; Burgundy Pitch,  
two Drams; of the Magisterial Stomach-plaister,- half an  
Ounce ; of Chymical Oil of Cinnamon and Nutmegs,  
each two Drops.

These Applications are of most Use after Purging, and that  
in those Constitutions which are enervated with Age, or the  
Distemper; However, the Physician is to take care, lest, in  
sanguine and robust People,- these Applications do not rather  
invite the Gout to the Part, than defend against it.

AS soon as a considerable Tumor is rais'd, *Mus.graue* advises a  
Blister to be laid On the Part, to evacuate the Humour, lest it  
should return into the Blond. These sometimes discharge a Vast  
Quantity, and continue running a great- while, inflaming the  
Skin, and caufing an Itching ; insomuch that it is not to be  
doubted but that the arthritic Poison is discharg'd with the Serum.

As soon as ever the Tumor and Pain are fufficientiy raised,  
the Dose of the Medicines is to he decreased, and not given  
so often.

But if it should happen, that by reason of the Inclemency of  
the Ain, Or the Coldness of the Season, or some Error in Eat-  
ing or Drinking, the Gout should leave the Extremities, and  
return to the Stomach, which is often the Case, the Cause os  
**the** Relapse must he diligently inquir'd into, and immediately  
removed. . - .

*. If fresh* Crudities are Collected in the Stomach, they must be  
evacuated by a lenient, and Verv gentle Purge.

. Is the Skin is contracted by.Cold, it must be relax'd by ex-  
ternal Warmth, and warm Cloathingt In both these Cases, in-  
ternal Medicines must be plentifully administer'd. . -

Podagragogue Medicines are requir'd so strong, and in fo  
Seat Quantities, in no Case, asina Relapse, or where the

Idy is loaded with Crudities, winch cannot be purged off  
hy reason ofthe Weakness of the Patient, or the long Conti-  
nuance of the Disease. - In these Cases, the Medicines should  
be composed of Steel, Ginger, and Pepper, and full of Volatile  
Salts; and should he taken in much greater Quantities, than  
**above** directed 5 and even then they will sometimes sail us, and  
the Patient will die sometimes unexpectedly, complaining all  
the while of an inexplicable Depressior) of Spirits, and Coldness  
**of** the Stomach. Sometimes, in the Irregularities of the wan-  
*dating Gout,* it is sufficient to reduce the Gout to the Inter-  
nodes: And sometimes 'tis even sufficient to free the Sto-  
mach from the gouty Matter, tho' it is only resorb'd and re-  
tain'd in the Blood. But in the Irregularities of the *sudd Gont,*the most definable Method is to have the Gout fixed upon the  
Extremities. . . .

It is entertaining to observe, that as the Pain, Tumor, and  
. Symptoms of a regular Gout appear and increase, the Pain of  
the Stomach,Nausea, Cardialgia, and other Symptoms, disappear;  
to winch succeed Hunger, good Digestion, a healthful Lustre  
**of** the Eyes, and other Signs of returning Health.

in order to guard against these irregular Fits, the Use Of 'the  
Steel-waters is Very good, drank properly, and. for a long  
**time ;** to which may he added, such Stomachics as cause Hun-  
ger and Digestion ; particularly the *Conserves of Roman Worm-  
wood, Raed Roses,* or *Hips ;* the *compound Powder of Arum ;  
Salt of Steel,* and *Ens Fencris.* Mean time. Care must be  
taken to avoid Indigestions, Cold, and all evident Causes *os*these Irregularities. . .

It is also useful to have an Issue in the Arm, or below the  
Knee, according aS the Gout is more subject to fix On the  
Hands or--Feet.

*Mus.graue* observes, that Affections os the Mind will some-  
times make the Gout, recede from the Extremities, and fix  
upon the Stomach, and gives a Case to this Purpose.

He also: giver some Cases, "which prove that cold Weather  
and Frost will sometimes prevent the Gout from falling on  
the Extremities, especially mold People , or make it recede.

*. The* **ARTHRITIC COLIC.**

**. The** *Arthritic Colic* is Very frequent, and. extremely pain-  
- sul, and has its Seat in the whole intestinal Tube from the *Sto-  
mach* to the *Anus,* tho' not in. every Part at the lame time ;

and it Often happens, that the *Stomach* suffers at the same  
time. - .

Both the fixed and wandering *Gout,* the regular and irregu- "  
lar, the. primogenial and syinptoinatid, sometimes appear ha  
the Shape of the *Colic :.* Bet principally that kind of sympto-  
matic *Gout,* which begins originally with the *Colic*; for the Seat  
"of this is somewhat ambiguous, fixing alternately on the Ex-  
trernities.and Intestines. -This Very often seizes upon old and  
infirm People, and sometimes affects those of Athletic Consti-  
tutions, who have not yet passed the Meridian of Life.

\* When a Person has been for a long time used to have regu-  
lar Fits of the *Gout* at Intervals, and now grows old. Nature  
begins to leave off these Paroxysms, and gives no Fit at all, or  
Very seldom; or else littie and short ones, either thro'Weak-  
ness, or some other Cause, which must diligentiy he inquir'd  
into. And then an Evil of another Kind, either sooner or later,  
generally seizes upon the internal Parts.

First, the Patient perceives an universal Indisposition, and  
Loss of Appetite, and frequently a Nausea and Pain in the in-  
testines, which is usually fixed to some one Point of the Ab-  
domen, generally aheut the Navel. Another Symptom is an  
Oppression and Heaviness of the Breast, aS if it was press'd by  
a Weight. This happens to most of those that are afflicted  
with the *Colic,* and is extremely troublesome.

These two Symptoms, Pain in the Abdomen, and Oppres-  
sion of the Breast, may he esteemed the primary Symptoms,  
The secondary are, a Distention of the Praecordia, Murmur-  
ings in the Intestines, Eructations, Vomiting of Matter gene-  
rally biliose, and CostiVeness. To these are to be join'd some  
others, which happen only sympathetically, as Languor *os* the  
Eyes, Dejection of the Spirits, Want of Sleep, Indolence,  
Anxiety ; and if the Distemper Continues long, a Weakness,  
and Emaciation of the whole Body.

This often, tho' not always, begins in Autumn, and, with-  
out proper Relief, miserably afflicts the Patient, all Winter  
followings For from the first seizing of the intestines, he lan-  
guishes and is oppressed with Wind, Uneasiness, and Pain,  
lies awake all Night, and laments himself all Day, till at last,  
depriv'd Of Sleep, Food, and all the Refreshments of Life,  
weary'd with perpetual Strainings .to Vomit, enervated and  
worn out with Pain, and extremely emaciated. Death, sooner  
or later, frees him from his Torments.

It seems to he Very plain, that the *gouty* Matter is the Cause  
Of all these Disorders. But these Symptoms, particularly the  
aforesaid Pain in the Belly, and Heaviness of the Breast, give a  
great Light into the Case ; yet as these are not so peculiar to-  
the *gouty CoUc,* but that they sometimes appear in *Colics of an-,*other Kind, we must take the Diagnostic from the preceding  
Distemper, that is, the *Regular Gout t* We must therefore ob-  
serve, if the Patient has lately had a Fit, whether it has. sud-  
denly remitted. Or gone off; and whether the *Colic* imme-  
diately follow'd this Intermission. And from these Circum-  
stances we may easily judge of the Nature of the *Colic. - -*

The external Causes of the *Colic* are Cold, too tight Shoes,  
or any sort of Ligatures, repellent Plaisters, Unguents, or Ca-  
taplasms. . - .

The internal Causes are, a natural Imhecillity of the Intes-‘  
tines ; an Accumulation of Impurities in the Viscera, which,  
heing difcharged from the Liver, Pancreas, and other Glands  
that empty themselves into the Intestines, invite *tbs gouty* Hu-  
mour to those Parts by their Stimulus, just in the same manner  
as stimulating Applications do to the Feet. And Crudities from  
the Stomach act in just the same manner. But no Impurities  
are more frequent here than those which are bilious, as the Stools,  
and what is thrown up by Vomit, eVidentiy shew. Amongst  
the internal Causes, may also he reckon'd the eating or drink-  
ing improper Things ; as Fruit, too sharp Cyder taken in  
large Quantities, or any other Error in point of Aliment, espe-  
cially those that are ofa cold Nature.- ο -

This *Arthritic Colic* is often fatal, and always dangerous. If  
the Heaviness in the Breast, and - Pain in the Intestines, espe-  
cially if it is pungent, continue long, 'tis a bad Sign, and the  
Patient generally grows gradually worse and worse, till he dies.

There is seldom any Safety till the *Gout* is expell'd into **the**Extremities, and’ even then, not in every Case, nor always.  
For tho’ the Gout gives Pain in the Joints, yet, if the Mass of  
Humours remain within, the Hopes we have from this Pain are  
very precarious; for the *Gout* is frequently invited thereby into  
the Intestines again, and destroys the Patient.

But if the Pain of the Intestines, Oppression of the Breast,  
and CostiVeness, entirely Vanish, and at the same time Pain  
appears in the Extremities, it gives a much better Prospect.

But if the Pains of the internal Parts entirely cease, the Ap-  
petite returns, and at the same time the Pain of the Intestines  
is considerable, the Patient in all Probability is out of all  
Danger. . '

In regard to the Cure, forasmuch as a bilious Fever some-  
\* times accompanies this Disorder, regard must he had to the  
Fever and its Symptoms, as Thirst. Heat, Velocity of **the**Fulfe. *tee. . \**

Therefore, if Occasion requires, the first Step we take should  
he to bleed the Patient, but Very sparingly, and only just so:  
much as will prevent the Inflammation, lest, by taking away  
too much, we at the same time take away all Possibility of ex-i  
pelting the *Gout. ' . : .*

Then, in case the Stomach is loaded with Crudities, the  
Patient should Vomis, by means of Tea, or an Infusion of Car...  
duns Benedictus ; for it may not be adviseable to give any  
stronger Emetic. ... .

. The Day after the Vomit, the Patient should be purged, if;  
hss Strength will permit is, or esse two Days after, with Ex-  
tractum Rudii, and Resin os Jalap, to which may be added,'  
Mercurius dulcis ; or with Syrup of Buckthorn, and Elixir Sa-  
lutis ; or, if the Fever is considerable, with a Solution of  
Manna, and purging Salts, in Barley-water ; Or by any other  
proper Purge. But no Paregoric must he given at Night after  
it, unless in case of a Hypercatharsis, lest it should put a Stop,  
to the Eruption of the *Gout* upon the Extremities.

Purging is here of the utmost importance; for without it,'  
and that too sussicientiy, the Cute will he extremely perplex'd ;  
and therefore Purging must be repeated, till the End of clearing  
the intestines is answer’d.

Mean time, on the Days betwixt purging, the Patient must  
take the *Testaceous Pcruder,* if the intestines abound with an  
Acid ; but if they abound with Bile, a bitter Alterative Infu-  
sion is preferable.

This Work being finish'd, which is half the Cure, we are  
then to endeavour at the Expulsion of the Gout, and not  
sooner. : .

To this End, besides the Remedies mention'd above for this  
Purpose, there' are some others, which heve always been  
esteem'd good for the *Colic*; and Aromatics too are here good ;  
. and, with these, those aboVe-mention'd may be very properly  
join’d.

Whet is here meant, are these following:

Powder of Zedoary-root.

Compound Powder of Arum-root.

The Pulvis Aurantiorum Compositus, and ? ει νν *yr.*

Pulvis Bezoardicus, *ydFulloru*

Species Dianinn Piperpern.

Simple Species os Calamint.

Species Diambrae, and Dianthus.

Electuarium e Baccis Lanri.

Mithridate. t

Ginger, candied in the *Indies,* and its Syrup.

The Chymical Oiis of Juniper, Cumin, Caraway, sweet  
Fennel, Anise, and such-like Carminatives and Aromatics»

Amongst Wines, the strong *Spani/h* 'and *Portuguese* red  
Wines, either alone, or impregnated with Bitters, have thePreference. . ' :

Prepar’d, in this manner, we are to attempt removing the  
*Gout* in the following manner, and endeavour to throw it upon,  
the Extremities.

The Patient must he put to Bed, and must take a Powder,  
Bolus, or Dose of Pills, made alter some of the following  
Forms: - - “ ’ .

Take *Gaseoigofs* Powder, a Scruple or half a Dram ; Aleo-  
- hol Martis, five Grains r Mix and make a Powder. Or,

Take Of the Powder of Zedoary, half a Scruple; Species of  
Calainint, or *Diambra,* one Scruple; Alcohol Martis,  
five Grains: Reduce to a Powder.. s

. The Forms of proper Boluses are these following:

Take of the Electuary of Bay-berries, or of Mithridate, of  
the compound Powder of - Crabs-claws, each one Scruple,  
or one Scruple and an half; Alcohol Martis, five Grains ;

- Syrup of Oranges, a sufficient Quantity: Make into a  
Bolus. Or, - . ' // -

Take of Ginger, candied in the *Indies,* oompound Powder  
. - of Arum-root, each one Scruple, or one Scruple -and  
an half; Alcohol Martis, five Grains; Syr upos Nutmegs,  
a sufficient Quantity: Make into a Bolus. Or, \* .

Take of candied Nutmegs, and Species Diambrse, each one  
Scruple; Alcohol Martis, five Grains ; Chymical Oil of  
Juniper, one Drop; Confection os Kermes, without Per-  
fumes, a sufficient Quantity. Make into a Bolus.

. Or, the following PillS may be used r

Take of the Species, with the three Peppers, and Powder of  
*Virginian* Snake-root, each half a Scruple . Alcohol Mar-  
tis, five Grarns; Extract of Rue, a sufficient Quantity;  
Forth into Pills.

Aster each Dose os these Medicines tho Patient is tcj drink a  
Glass of *Spaniso* Wme, -or red Port.; or a Drancht of some of  
the following Jalaps:

Take of Cardans and Mint-waters, os Alexiterial Milin-  
water, and compound Chamomile-water\* gach .three

. Ounces; Epint of Juniper, half an Ounce, or a whose  
. Ounce ; prepar'd Pearls, halfa Dram ; the finest Sugar, a  
sufficient Quantity: Make in to'a Ju inp. Or, ..

-Take os Alexiterial Milk-water, twelve Ounces; *Brnasujic*' Mum, four Ounces ; prepar’d Pearls, half a Dram; and  
a sufficient Quantity of Sugar. Make into a Julap.

' If the Patient likes a liquid Form hetter than any other, let  
him have a Draught of the following Infusion, with the Addi-  
tion of Steel

Take Of Zedoary-root, Galangals, sweet Flag, and Tops  
of *Raman* Wormwood, each two Drains; Juniper-ber-  
ries, and *English* Saffron, each one Dram: Infuse in two  
Pounds of *Spanish* Wine, till the Liquor is sussicientiy im-  
pregnated ; then let the Infusion be strain'd off.

Take three Ounces os this Infusion, and five Grains os *Al-  
cohol Martis, for* a Draught: Let it be shaken before the  
Patient drinks it. '

Let the Patient take some one os these Medicines every sour,  
five, or six Hours; and in the Middle of the Intervals, be-  
twixt each Dose, let him drink a Glass of one of the aboVe-  
mention’d, or some other generout Wine, in as large a Quan-  
tity as he can with Safety. ' . . i

This Rule is to he observ’d in regard to his Medicines, that  
they must be . taken in such a Dose, and repeated so often, aS is  
sufficient to remove the *Gout to the* Extremities, without  
raising any greater Degree of Fever, or any greater Orgasm in  
the Blood, than what in sufficient for this Purpose. ;

It sometimes happens, that, after Vomiting .and Purging,  
the Gout discharges itself upon the Extremities, and .hecomeS  
regular, especially in robust Conshtutions ; and then .nothing  
remains farther to be done, but to take care, that it discharges  
all its Fury there, and that it remains where it is. ‘ '

But as many Difficulties often occur, before the *gstuyy* Mat-  
ter can he brought to fix upon the Extremities, it is) necessary,  
to point them out.

Sometimes, then, the Intestines are so contracted with  
Spasms, that Very strong purging Medicines will have no Effect,  
nor in the least purge the Patient: In this Case, a Fomentation  
must he apply'd to the Abdomen, which must be occasionally  
repeated:

Take of the Tops os Southernwood, and Mugwort, each an  
Ounce; of the Roots of round Birthwort, and Chamomile-  
flowers, each two Ounces; ofBay-herries, .an.Ounce; of  
the Seeds of Caraway, and sweet. Fennel, each half an  
Ounce: Boil in ten Pints os Spring-water to five; and to  
the strain'd Liquor add camphorated Spirits of Wine; a Pi nt.  
Make a Fomentation, to.he. apply'd, as het as .it can he  
endur’d. Io the Region OTthe Bally.

After each Fomentation, her the following Liniment her  
Iubb'd in: \_ si . ἄκ : - .

Take of Soldiers Ointment, two Ounces; Oilof Turpen-  
fine or -Tar, and Chymical Oil of *Rhodium,: each fa.*Drops: Make into a Liniment, .ior.. ι

instead of ufing this, the whole Belly may he .anointed with  
the *Galbanetum Paracelsi,* describ'd in *Rdverius* from *Crate,  
Cap. de Colica,* and is as follows .: / ι,:. ..

Take Of Gum Elemi, Hedera, Galbanum,. .C)il ο/Days,  
each equal Parts: Distil in a Retort by *a.* Sand-heat; let  
the Water which comes over first, the clear, Oil, .arid the  
thick Ost which comes over last, of the Corinstence os  
Honey, be kept separate,, the last of which is to be  
used. . ' si. δ᾽ '

It sometimes happens, especially in tender: Constitutions,  
that, after purging, considerable spasmodic Contractions, , and.  
a great deal of Pain, will still remain, which'issometimes con-  
tinual, and sometimes intermittent. These must .he sour'd  
partiy by the above describ'd Fomentations and Liniment, and  
partly *by* the following Clyster r - , .. si'su si si

" Take of *Canary* Wine, half a Pound; Electuary ns Bay..  
.. .- berries, half an Ounce. Ehis Clysterin to he retain'd as .

long as possible. .. \_ \_ " , Y y

Sometimes/the Intestines ale so weak, that they will not  
bear Steel, but immediately throw *off* that, together with  
whatever other Medicines are join’d with it, by Stool. In such  
a Case, it would he adviseable to give the other Medicines-with-  
out the Steel. .

- Sometimes not Only Steel, but even testaceous Powders, will  
run off by Stool. When this happens, the Diarrhoea must he

stoppss; shr. there is no Hope of the regular Gout whilst that  
‘continues: And therefore we must, upon thin Occasion, call  
in to our Assistance *Jupan* Earth, Chalk, Dragon's-blood,  
*Isenice* Treacle, Electuary of Bay-berries, and the'above-men-  
tionin Species taken from the Vegetable Kingdom, as also the  
Chymical Oils, in order to put a Stop to it. *sol..*

*Asinon* as a Medicine is sound out winch will agree with the  
Patient’s Stomach, he must continue the Use os it .for two or  
three’ DayS.;.and is, in that Time, there is no Appearance os  
the Gout in the Extremities; we must call to our Assistance  
stimulating Piasters, Cerats, or Cataplasms : And even after the  
Gout appears in the Extremities, it will he convenient to con-  
xinue the internal Medicines' till it is entirely fix'd there, and  
has quite left the Intestines. And when tins Point is gain'd,  
we should still continue the Medicines, either in half the former  
Dose, or else repeated half; as often, shr sous, six, or eight  
Days ; that is, till we have Reason to believe the intestines out  
of Danger from any Revisit from the Gout.

Mean time, 'tis very agreeable to observe, that as soon as  
**the** Gout is once fix'd upon the Extremities, all the Complaints  
of the Intestines suddenly Vanish, and a certain Sprightliness  
-returns to the Eyes, and appears in the Countenance ; aS does  
also a good Appetite, and due Digestion. *scA.*

- During this whole Course the Patient should have a most  
exact Diet prescrib'd him. .. so

Panada, Jelly of Hartshorn, of Ivory, Biscuit, Chickenr.  
broth, are very proper; bur Wine is particularly useful, either .’  
.by itself, or mix'd with the White Decoction.'

But Very great things may he expected from a plentiful Use τ  
of Wine, in the .Cases of such as have been much used to it. .  
But the Very best Sort is red Port, of which the Patient may  
he allow'd to drink from half a Pint Io a Quart in a Day and **a**Night, as Occasion requires. Mean .time, if there in any con-  
siderable Costiveness, which is very common, the Patient should,  
eVery.other Day, have a lubricating Clyster, either of Oiis, or  
Mutton-broths. It is to be observ'd, that sometimes, tho’ **the**Intestines are entirely .deliver'd from the Gout; andsttis driven  
into the Extremities, the Belly is inflated with Wind, and is  
‘ still full of: Pain, so as to make the Patient almost out of Hopes  
of a Recovery. But as this is.only, owing to a Flatus, *(scVind)*and the Weakness which the Distemper has left, it may be  
generally cur'd ‘by this Clyster, continued every Day, Or every  
-other Day. .\* \*. z: ... iss

In this Clafe alfo the bitter Infusion, and such sort Of Sto-  
machics as increase the Appetite, and mend Digestion, are very  
inseful. I ’ . ' is l . ..

in order to prevent Returns of this Disorder, the Patient  
must eat sparingly, and do all: he can to promote Digestion.  
He .must frequently take some .gentle Purge which is stomachic,  
and must use -other stomachic .and gentiy .restringent Medi-  
.oineS. ..- -ὑ .. , 1 ' si . ἐν ν-' - ' l τ

, The Mineral Waters, both purging and-diuretic, have heen  
.Of signal Service .to -many.; .and many others have found great  
.Benefit by taking, twice or threetimes aYear, either the *Alford  
Waters,.purging Salts, Gr-Tortarum Laxans,* rdiflolved in Ban-  
-Iey-water.' - Some have found Relief by mixing -the: purging  
-with thediuretic Waters. ' The *Bath* Waters -have long been  
-esteem'd good against-the Colin; and are particularly Useful in  
-mhis-Species.of -it. - In the Intervals betwixt the Use tof the dim.  
retie Water, some proper Alteratives are to he taken ; as, at  
iten.-in .the Morning, a Dranghtsof a bitter Infufioisp made .with  
..white Port; as- aim every Day, after Dinner,, foine Spoonfuis  
-of the same Wine alone, l At five in the Afternoon ia.Drasn of  
The-following Electuary, with any convenient Vehicle, will he  
propert '-u Ί i . ί ; . ... οῦἐν.τι he:; qui. ,,-i

*'. sec y.C.stt'ά* ι'2

. Take of rhe Conserve of Hips, .or of .red .Roses,*pafssd* thro’  
‘ a Siems, *Roman* Wormwood, Ginger, -candied imthe *In-*

*dies,* each -half an Ounce-; Salt of Steel, Tour .Scruples i;  
Syrup of Ginger, one-Ounce and alhalf; Chymical Oil-os  
iCinnamon, fiveDrops -:’Make into an Electuary. -Or,r

. .. . . a . L . ..V *so.' . si T.J* E! i *e.* s' - . t

Take-of Hedychroi Troches, and Conserve. of.Orange-peel,  
.each half .an Ounce; Salt’ of .Steel, .’one Dram.; Species  
Diainbrin, one Dram I. Alcohol -Martis,; .three: Drams;  
Syrup of Wormwood, a sufficient Quantity: Make into  
an .Electuary. ' . - -Ἄ. s si.:.-, i? . .st

. But.sorasmuch as this *Colic* generally takes it Rise from.ex-  
ierniil Cold, we are to guard against it hy warm Glpathing, and  
avoiding the Inclemencies of the Ain . ὑ ’...t

?. It must, he added, chat People of an advanced Age, .who .have  
Donee had this Distemper,..and have heen hinderin, either thy  
.their Business or Pleasures, from preventing. a Return, .have  
seldom.-sail’d IO pay Tor .this .Neglect, either .with; .their  
Healthinrldfe. . .δ᾽. ... Ἀ .Ἀ, .υ .τ :

*Mus.graw,* in Confirmation Of his Doctrine, veayinstly  
quotes a Passage of *Hippocrates,* from thesixth Book os inpide- ..  
nines,. *Scct.su..* It runs thus, si τό ἔντερον ἐπιςδεδόμ πὸτικτικάστ .. .  
ἐγένετο, ἐν ήσυχώτερος’ ἐπεί -καὶ τήτω ιητρέυθη, *nasyoisatirrsT^A, A .uri*

*certain Person, having a Paim in his suiestines, on the Right Side,  
seeing spiesd rtith the Genet, became better; but when he was  
cured of this, he relapsed ima his former Pain, and grew  
‘deorse... . ' ... ..*

This *Hippocrates* repeats, at the latter End *os* his Treatise  
περὶ χυμῶν.

*Masigravso* might also have taken Notice, in Confirmation of  
his Practice, that *Hippocrates,* in the second Book os Epidemics,  
directs, *when there is a flight Ileus, frt^iey that is9 Pace ea tha  
Ileon, the Patient mast drina a reasonable quantity of unmix'd  
Wine, till he falls asteep, or perceives a Pain in his Legs sc*

Js there is a thielc white Crust upon the Surface of theBlood, ’  
after'tis drawn away,; It abundantly Confirms this *Colic Acs he  
Arthrstio*; because in the genuine *Colic* it is not usually so.

*However, in an. inflammation of' the Intestines, which is often  
mistaken for the Colic, sue Blond generally appears say.. .*

In *Nsstory Mus.grdvc* gives an Account of an old gouty  
arid paralytic Gentleman, who, upon a Suppression os a Dis-  
charge of the Saliva, which had for a/long time heen consider-  
able, and a Cessation os the Gout, and Swelling os the Feet,  
.which had sor many Years been very great, had 'this Co/rd ; but  
upon purging, and.tekmgCcdurarrf’Ssenips, and *Alcohol Martis.,*the Gout, Salivation, and Swelling of the Feer, return’d, and  
he was oured of the *Colic.* ' εἴ- ῆ

The Purge he took was Calomel, with Resin of Jalap, and  
*Extractum Eudei. , so - - .*

*Hosts* 8. he tells us os a Gentleman who was afflicted with .  
the Gout for twenty Years, who, every Autumn that he miss'd'  
having’ the Gout,; had an Epiphora, which discharged an acrid  
and pungent Serum from jthe Eyes,' for fix Or eight Weehei

An ARTHRITIC DIARRHOEA.

. If a Person, long used to the *front,* in the midst of his Fit,  
ssalls into a Diarrhoea, and at the same time the Pain and ex-  
'.temal Swelling decrease, and soon entirely vanish, 'tis very evi-  
dent, that this Diarrhoea is *Arthritic.'" '*

It also frequently happens, that before the Patient seels Pain  
in the Joints, the Diarrhoea diverts the *gouty* Humours from the  
Extremities, where it would otherwise fall, and carries rit off  
by the Intestines.: //“' ' } '''

’This Diarrhoea, which anticipates' the Fit of the Gout, is fre-  
quently found to be salutary. Health and Vigour returning after  
tit; but this happens only in good Constitutions, where **the**Fibres are robust, and the Spirits firm. "Ἀ .\* ' ” ’

But the Cases where this Diarrhoea utmost frequent are,.vthen  
seither a Purge has been given, or else when 'the Intestines- are  
stoaded with Crudities, which stimulate, and find a Passage for  
τ themselves, together with the *gouty* Matter.

c. ' The Event of this' Diarrhoea is exfrainely uncertain; Tor if it  
stops in time, and is not excessive, 'in very often proves of Use,  
cas it carries *off* the *gouty* Matter byjaiWay that' is safe, enough,  
^tho' not the most common ; and Ellas' this Advantage attend-  
Ing it, that' .the Paroayshi does pot' return'of a long .time aster  
feet “ " s'’ ' ""si... -) ’ n ')

Υ But in those whose Viscera are debilitated by Debauchery,  
’ so aS to render Nature' incapable os moderating the Crisis, it  
sometimes become To excessive aS to destroy the Patient.' -  
~ 7' In this Diarrhoea nothing -in 'Inores foolish' nor dangerous,  
Than to do tooniuch; for an ossicionSDiligchce disturbs Nature,  
'and'interrupts her'inthe'Workishe',bias: begun,' when it is'het-  
'uter Io leave her trfherself, and 'permit/ that to he discharged,  
'which, is retain'd, would do Mischief.

'"‘Tut is the Diarrhoea 'becomes tooexcessive, and istoo.'great  
*sat* the Patient's Strength, it must-he moderated by ALstringchtS,  
and the lStrength mnst.he kept up byiCardiacs. ’ ς-. 1 .

' Y But whether "the Diarrhoea "stops of its own Adcoid, or is  
'stopssA hsiMedimnesf after some time she Relicts are to be  
'spurgllsoff by the Purging Waters, with an Addition os *Tar-  
tarum Laxans,* or .Manna, if the SCaso. requires Such Adds-  
tifin. ss ' “ *si.su.~ - δ᾽άῖεἴ si.,si* ς \* -

*sef Is* this Diarrhoeaishotild happensifromTaking a Purge, 'Medi-  
ΤCine in this Case,Esth the soriners,JiS 'uintecessary, we. having  
Shsp'roimurdiagairssi.ch.HyAerMsea^I.et ' '.;i" \*

But in case this’ Diarrhoea’ arises frorn:Crudities, which is, of  
4all, the most dangerous Case,, in nlust the treated .in a different  
ἵ manner.' Here'It Tometimes' happens, that the Stomach is  
.^loaded, and .then d Vomit osTeassor Cardnus, may he proper.  
"After which, orwithouConh,sa gentlrfPurge should be given:  
.And then recourse*.must* he -had to.Restringents, and suchMedi-  
~ dines *as* will moderate the Diarrhoea. Let 'the Patient take,  
seyeiy fourth, i^thduror sikthMoutssa Bolusof Y -

Dinseordiuins, ISpeCieS of -the .Confection of Hyacinth, astrin-  
gent Croons,os Mars, JamimiEarth, and Syrup os Roses.  
Aster which Jet \*.him: drink A draught of 'the Cretaceous  
Julap.\* *i -\* .. --- -- -*

ς Eet the Patient have also a Clyster of CtfItaryWine, Jelly of  
JSiarch, or Diascordiurn.

Let the Belly also he frequently fomented with a Decoction  
of the Roots os Bistort, Tormen.il, and Balaustines, made  
in strong Beer-

Let his Drink he the White Decoction, or an Infusion of red  
Roses, and sometimes some red Wine burnt.

If the Pulse will permit. Opiates arc of excellent Use, as a  
sew Drops of Laudanum, or about a Grain of Opium, with  
half a Dram or two Scruples of *Venice* Treacle.

If there should be anv Danger Of the Diarthcea running into  
a Dysentery, let the following Emulsion he taken;

Take of calcin’d Hartshorn, half an Ounce . Gum *Arabic,*and Tragacanth, each two Drams; Boil in three Pounds  
of Rice-water, of the third Decoction, till they are  
reduced to two. Let the strain’d Liquor he pour’d upon  
decorticated fweet Almonds, and white Poppy-seeds,  
during the Time they are bruising: Then strain the Liquor  
a second time, and give it an aromatic Flavour with strong  
Cinnamon-water: Then edulcorate it with Sugar.

When the Patent is much reduc’d by theDiarrboea, Vomit-  
ing and Purging must he omitted ; and Cardiacs and Astringents  
only must he used.

But to whatever Cause this *Arthritic Diarrhaea awes* its Ori-  
gin, the best and most pleasant prophylactic Cure is that by the  
Steelwaters, to which some Preparation of Steel should he  
added ; and, amongst all the Preparations of Steel, the *Alcohol  
Aelartis* is the best. »

Tn his sixth *History, Mufgrave* mentions frequent Oseitation  
as a Fore-runner of *a gouty* Diarrhoea, in a certain Person he  
mentions.

**.. ,, An ARTHRITIC DYSENTERY.**

An *Arthritic Dysentery* principally seizes upon those who  
have a thin Habit of Body, and particularly weak intestines,  
and are used to the *Gout.*

An *Arthritic Colic* generally precedes this Distemper, and  
when the Fibres of the Intestines are weaken’d by frequent Fits  
of it, and either some external Cause forces *the gouty* Humour  
inward, or some internal Caufe invites it thither, it falls with  
Fury on the Intestines, by the Cceliac and Mesenteric Arte-  
ties.

Hence arises a gnawing and eroding Pain, with a quick Pulse,  
and a sinall Fever. If, at the same time, there is any *Gent in*the Extremities, it immediately vanishes, and all flies to the  
Intestines; and there, breaking the distended Arteries, the ex-  
travadated Blond is pout’d into the Intestines; and is thence  
thrown out by the Anus, and sometimes by the Mouth, in the  
.Quantity of a Pint, and sometimes two. Great Languors  
immediately succeed this, and Loss of Strength ; the Extremi-  
ties grow cold, the Patient falls into frequent Dellquia, and his  
Life is in imminent Danger.

The Pain is eased by this Evacuation; anil if the Patient  
can sustain the Violence of the Fit, he grows easy, and is for  
some time free from any Fit of the *Gout*.. For after the *gsuri*Matter has been in this manner discharg’d, a new Fit cannot  
happen, till new Matter is form’d in the Blond.

This Distemper is not always content with one Visit, but  
oftentimes returns, and exactiy refembles.the *Gout* in regard to  
its Periods ; and sometimes the first time, sometimes at its Re-  
turn, leaves an Ulcer or Abscess in the Intestines.

The Patient must rest either in Bed, or in a Chain, whilst  
the Paroxyfin lasts, lest the Motion should exagitate the Blond,  
and increase the Flux. ...........

Mean nine, it may he of vast Prejudice to give Cardiacs in  
Quantities large enough to inflame the Blood, and by that means  
increase the Disorder. They must therefore he carefully given,  
and ouly in such Proportion as is sufficient to support the spirits,  
and keep off a Deliquium. '

In case the Discharge hecomes too considerable to he easily  
supported, it must he stopp’d by Laudanum: And therefore  
some Laudanum should he held upon the Tongue, and in the  
Mouth ; and must he continued in mis manner till the Flux  
ceafes ; for if it goes into the Stomach, it will immediately he  
return’d by Vomit.

Out Author her often found the White Decoction of great  
, Service : It must he taken in small Quantities, and often ; and  
the Patient must mite nothing else for some time, either of  
Food or Medicine.

As Care must he used, on one band, that the Intestines are  
not too much open ; so, on the other, they must not he'cori-  
trafted ; and if the latter happens, they must he gently relaxed.  
It must be remember’d, that this Dysentery-is critical, and that  
therefore an Error, on either Side, is attended with Inconve-  
r.iencies, so that a Medium is heft ; and this Mediocrity must  
he discover’d and obtain’d by having a proper Regard to the  
Patient’s Strength. . .

It often happens, that after the Gout is expell’d by these  
bloody Stools, all is easy and quiet; but in case it happens  
otherwise, and the Dysentery continues, it is proper to give

such Remedies as will stop it, and contrast the Wound of the  
Intestines. As,

Tinctirre of *Japan* Earth, dropp’d into theWhito Decoction,  
Or into, strme vninerary Decoction ; or the Balfarn of *Liua-  
tellus,* with Olibanum, Mastich, Dragonis-blood, and  
the astringent Crocus of Mars ; or with the true Bole, in  
the Form Of Pills, or with Conserve of Hips, or red.  
Rofes, pass’d thiol aSierce, the Species of the Coofection  
of Hyacinth, with Syrup of dryd Roses,- in the Fornt of  
a Bolus, to he taken in the same Vehicle.

Let the Abdomen be fomented with Stupbs wrung out of a  
restringent Decoction, with an Addition of red Wine.

If the Vein, from whence the Blond is discharg’d, happens to  
be near the Anus, a Clyster of the Jelly of Starch, or some  
such gluish Medicine, should he insisted, and retained for **a**long time. Mean time all Acids are to he avoided as perni-  
cious, by reason of their Stimulus.

Let the Patient’s Diet he Jelly of Hartshorn, or Ivory, or  
Calves Feet, poach’d Eggs, Rice helled in Milk, or Cremor of  
Rice; and such sort of things which nourish, incrassato, and  
agglutinate Wounds.

- It is easy to perceive, that .the Cure of this *Arthritic* Dy-  
sentery is very different from that of a common Dysentery ;  
for the letter requires repeated Purging, whereas the sonnet  
seldom admits of any purging Medicines at ass

The *Tunbridge, Bampton,* or fucti sort of chalybeate Waters,  
are the best Medicines that can he used in order to guard against  
a Return, especially if some Preparation of Steel, with Re-  
stringente, are taken at the fame tube.

in Hist. I. *JlAufgrave* tells us, he diredled a Sheepskin, just  
taken off, to he apply’d to the Feet, in order to invite the *Gout*thither.

In Hist. 2. he gives an Instance of his directing *VeniceTns. -*Sntine, with Powder of Marshmallows, in a Bolus, twice a  
ay, in order to heal the Wound in the Intestines, which the  
Dysentery bad made, or rather the *Gout.*

**ARTHRITrc OR GOUTY ABScEssES OF THE INTE-  
STINES, sec under the Article ABsCESsUS.**

**ARTHRITIC MELANCHOLY.**

This sort of Melancholy affects those People most, who are  
of soft, tender, and delicate Constitutions, who are naturally  
timorous, or who from any Other Caufe have heen inclined to  
Melancholy from their Infancy. These, whilst they have re-  
gular Fits of the *Goat* in the Extremities, are, during the in.  
tervals, very chearfid and well; but when the Paroxysms either  
altogether cease, or are insufficient to carry off the *gouty* Mat-  
ter, but particularly when **the** *Gout* seizes upon the Stomach  
and Intestines, the Appetite and Digestion begin to he deprav’d.  
Then the Patient is troubled with Hypochondriac Wind,  
Murmurings in the Intestines, Distention of the Praecordia, and  
sometimes an almost continual Pain of the intestines. Hence,  
by the Coofent of Parts, the Brain and nervous System is  
aneoled, and the Patient becomes melancholy. Nothing can  
he more miserable than the State of these unfortunate People;  
for they neither steep nor ear, and are fo dejected, as to he  
even weary of their Lives, and will not so much as hope to he  
:ever in a better State.

No Species os the anomalous *Gout* is more chronical than  
this, nor scarce any more frequent. It generally hegins about  
the forty-fifth or fiftieth Year, and seldom leaves the Patient  
entirely, unless Medicine effectually interposes but returns at  
Intervais, and those often very short ones. However, when  
the *Gout* is worse, this Melancholy is better, and *vice versa.*

*Mofgrave* distinguishes hetween the *Melancholia Arthritica,*-and the *Arthritis Melancholica* ; the former bring, according to  
him, a *Gout* terminating in Melancholy; the latter, Melan-  
choly terminating in the *Gout.* The Cure is to begin with un-  
loading. the Stomach and intestines of the Mass of undigested  
Humours contained therein, by a Vomit, if necessary, and  
.Purges of the milder Sort, as Tea and Carduus Poflct-drink for  
**a** Vomit ; as Rhubarb, the Tartar Pills of *Pontius,* the Sto-  
machic Pills with the Gums or something of this Kind, for a  
Purge. Ἄ : ... ' .. ;.... .

the Evening after the Operation of the Purge, a Cardiac  
must he given instead of a Paregoric; and afterwards, when we  
come to Alteratives, they must be given in a Quantity sussi-  
cient to expel the *Gout* from the external Parts into the Extre-  
mines.

In order to prevent a Relapse, the Diuretic Waters  
"must he drank regularly for a considerable rime; and if the  
*' Gout does not return* regularly at Spaing or Autumn, or heth,  
spontaneausty. Fits must he procured by Medicines-proper for  
that Purpose. Mean tone the Patient must be extremely regu-  
lar in point of Diet; a gentle Purge must also he frequently  
given, in order to carry off any undigested Remains of the Ali-  
ment. *Mufgrave* recommends the following, which he calls  
-Piluhe. Melancholicae..

.Take of the Pills Of *Macrus, (in the old London Dispensu-  
iory)* and of the Stomachic Pilis, with the Gums, each  
one Dram and an half; of the Pills of Rudius, one Dram ;

Refin of Jalap, half a Dram ; Chymical Oil of Cinna-

. mon, ten Drops ; Balsam of Peru, a sufficient Quantity :  
Form into a Pill.

The Dose is half a Dram, to be taken every Morning once  
2 Month ; or instead of these, the Laxative Tartar and Manna,.  
each in the Quantity of half an Ounce or an Ounce, dissolved  
in a Quart of any purging Water, may he taken. - -

A Paregoric must be given at Night after each of these Doses,  
taken by way of Prevention. \* ῖ '

Nothing is more serviceable in this Case than Exercise, par—  
tieularly Riding. ...

*N. B.* The Cases which *Mus.grave* relates are worth ob-  
serving, in one of which, in order to clear the Head, he re-  
commends the following Snuff r .. . -

Take of the Stalks of Tobacco, one Dram ; Tops of.Mar-  
joram, Rosemary, and Sage, each half a Dram; Root of  
white Hellebore, one Scruple; Musk, two Grains: Of  
all these dry'd make a Powder for an Errhine.

**An ARTHRITIC SyNcOPE.**

. The *Gout* often causes a Syncope, especially after drinking  
cold and thin Liquors, or eating any thing which the Stomach  
is not able to digest.

In this Case the Patient first finds himself ill all over, then  
grows pale, and breaks out into a cold Sweat. His Pulse is  
weak, flow, and unequal, and sometimes intermits ; at last he  
saints away, and loses all Sense and Motion. Mean time is  
there were any Signs of the *Gout* in the Extremities, it in-  
stantly retires, and the Patient dies, without immediate Assist-  
ance. - - - . - . ..

\_ The best Medicines are Cardiacs in Very large Doses, and a  
liquid Form, to he repeated often. *Mus.grave* recommends  
the *Aqua Hispanorum Arthritica :* Or the following Julap :

Take of Compound Wormwood Water, twelve Ounces ;

Spirit of Mint, and Compound Spirit of Lavender,-  
feach two Ounces ; and of the finest Sugar, a sufficient  
Quantity: Mix up into aJulap.

. ' The Dose of this is half an Ounce, an Ounce, Or two.  
Ounces, to be repeated as Occasion requires;

' With the first or second Dose of this, may be. given the fol-  
sowing Bolus or Powder; -'

Take of *Venice* Treacle, half a Dram ; Flowers of Sal Am-  
moniac, half a Scruple ; Conserve of Rofemary-fiowers,  
one Scruple ; Syrup of Citron-peel, a sufficient Quantity:  
Make into a Polus: Or,

Take of Powder of *Virginian* Snake-root, half a Scruple ;

*Species Diambra,* one Scruple, or one Scruple and an  
half; of Long-pepper, three, four, or five Grains; os Chy-  
Inical Oil of Cinnamon, one Drop . Reduce to a Powder.

For want of these Medicines, burnt Brandy will answer the  
End; or succinated Spirit of Hartshorn may be added to the  
- Cordial Waters, sor the same Purpose.

Mean time Frictions must be used ; and Stuphs immersed in  
hot Wine or Brandy must be applied to the *Scrobiculum Cordis,*and all over the *Abdomen,* which must frequently be renew'd.

This Method must be pursued till the Patient comes to him-  
. self, and is recovered,’ which however seldom happens till the

*Gout* is forced into the Extremities, and fines there.

If the Patient has eaten any thing difficult to digest, and is in-  
clined to vomit, aS soon as he comes a littie to himself, it  
should be brought off his Stomach, by a Decoction of Tea or  
Carduus.. But if he is so bad, that there is no Time to lose, he  
must drink a large Quantity of Wine, in a Very littie time,  
that it may answer the End of a Cardiac, and at the same time  
' ofa Vomit.

. S If these Fits return frequtntiy, the Patient must always have  
some Cardiac Waters by him, to take as soon as he finds him-  
seif disordered.

.These strong Waters,' though extremely injurious to Peoplo  
in Health, are, however, excellent for old *gouty* People,  
who have been accustomed to drink Quantities of Wine, and  
are troubled with this sort of Syncope.

In a Case of this sort *Mus.grave* gave a Patient a few Grains  
of *Alcohol Martis* with his *Julap,* after he began to complain  
of a Pain in his Foot; the Consequence of winch was, that in a  
sew Hours, before he had taken a Scruple, his Pulse became  
more quick and strong ; he began to he Very hot all over ;

... the Haemorrhoidal Veins discharged some Blood; he had great

-Thirst, a violent Agitation of his Spirits, and Swelling with

\*. Redness in his great Toe,

He then blistered him in several Places, and apply'd a Plaister-  
to his Toe, made up of equal Parts of *Burgundy* Pitch, and Ce-  
phasic Plaister, and put theWhole of the Foot in a Sock of green  
Cerate, tying it on with a woollen Roller.

Soon afterwards the Gout seined his Shoulder, whilst he all  
along used the Cordial Waters internally ; and in order to in-  
vite it thither, he apply'd to the Part affected a Plaister of Gum  
Caranna.

*The* **STONE** *in the* **K1DNEYS** *from the* **GOUT.,**i This Distemper is easily distinguish'd from the *Arthritic Co-r  
lie*; for in this,there is no Difficulty of Breathing, no acute  
Pains about the umbilical Region, no Melancholy, nor Discharge  
of crude, acid,‘and bilious Matter by Vomit, which are Sym-  
ptoms of the other.

The Method of Cure of the Stone, attended with the *Gout,*differs from the Cure of the Stone without it in some Particu-  
lars : For in the former, we must be very cautious of Bleeding,  
and of using" acid Medicines ; nor must we apply Fomentations,  
Liniments, and Cataplasms, to the Back, especially if the Pa-  
tient has a Fit of the *Gout* at the fame time.

But a Paregoric may be given in such a Dose, and repeated  
so often, that the Pain may be eased without prejudicing the  
Head by driving the *gouty* Matter upon it.

But if the Stone happens in a *gouty* Constitution, without  
being accompanied with a Fit, the Method of Cure is different ;  
for then the Patient must lose, some Blood, especially if he is  
Plethoric; and soon after let .him have the following Clyster:

.. .

Take of the common Clyster Decoction, and new Oil of  
sweet Almonds, each half a Pound ;. of *Fence* Turpen-  
tine dissolved with the Yolk of an Egg, one Ounces Let  
it be injected. .

- -Next Day give a Purge of Lenitive Electuary, or Rhubarb,  
or Manna, dissolved in a Decoction of Sena : ‘At Night  
give as much Of *Matthew's* Pilis, as contains one Grain *os '*Opium.

... If the Pain is very Violent, in order to relieve it, and pre-  
vent Spasms of the Intestines, a Paregoric may be given a few  
Hours before the Purge; and .if it does not operate, give **a**Clyster.

When the urinary Passages are by thefe means dilated, the  
Stone must be brought away by Opobalsamum, or the Balsam  
of Chili or Peru, taken two, three or four times a Day, in  
Syrup of Marshmallows, or the balsamic Syrup.

. The Dose of Opobalsamum is half a Scruple.

Mean time the Patient may drink soft Ale like that com-  
monly called *Grout-ale,* or Apozems made of the Roots of  
Marshmallows, Liquorice, and Eringo, Pearl Barley, *etc.* or  
other things of a like Nature, or Green Tea, or Emussions  
made of sweet Almonds, and she above-mentioned Decoction,  
or Apozem. -.. . ’

*. Mus.grave* recommends an Emulsion made of ten sweet Al-  
monds, and two Pounds *os* the Infusion os Tea, with the Ad-  
dition of Rose-water, or Cinnamon or Barley-water, and. a suf.  
ficient Quantity of sine Sugar; or a proper Liquor may be pre-  
pared of White-wine, Oil of *sweet* Almonds, and sine Sugar.

This Author recommends, by way of Prophylactic, *Bristol*Waters, taken with Opobalsamum, and some lubricating and  
diuretic Syrup ; or for want of these Waters, green Tea every  
Morning.

*It Las howeucr been found, that sometimes the* **Bristol** *Walers  
cause stony Concretions,, ana increase the Disorder.*

*Mus.grave* says, he knew . one who in some measure kept  
himself free from the Stone, by taking three or four times a  
Year one Dram of *Venice* Turpentine, reduced to the Form of  
Pilis by the Addition of Liquorice-powder; after which he  
drank some Pints of Small-beer or Posset-drink, and immedi-  
ately rode four or five Miles upon a trotting Horse.

Lenient Purges must always precede Diuretics,

In case of a Dy fury proceeding from Spasms of the urinary  
Ducts, nothing is more efficacious than Opiates Joined with  
Diuretics.

The Dose of Peruvian Balsam is ten Drops taken in a Spoon-  
ful of the balsamic Syrup, twice, or at most three times, a  
Day.

**'An ARTHRITIC ASTHMA.**

Those People are subject to an *Arthritic* Asthma, who  
have a bad Conformation of the Breast and Organs *of* Respira-  
tion ; and those whose Parents were Asthmatic, or *Arthritic,*Or both, are most subject to this Disorder.

An Opiate improperly given, any thing that repels the *Gout*from the Extremities, a sudden Suppression of any habitual Eva-  
cuation, either of Blood, the Lochia, or from an Ulcer, cause  
. this sort of Asthma ; and it often happens, that an Asthma im-  
. mediately follows a regular *Goubn* when the Fit has by any

Cleans been shortened 5 as a Fit of the *Gout* often «ores an  
Asthma. . \* -

*Arthritic* Asthmas, like others, are of two Kinds, the dry.  
and moist Asthma: in the former the Patient's Respiration is  
very short and difficult, gasping as it were for Breath, with a  
great Oppression of the Breast.; mean time he has Very little,:  
is any Cough, and spits butlittle. These who have used them-  
selves to drink Brandy, and such spirituous Liquors, are mosh  
subject to thin Sort. - .

In the moist Asthma the Patient coughs up generally a thick,  
Viscid Matter, by which he is relieved, till a fresh Supply is fur-  
nished by the Blood. This commonly affects PeopleOf a thin,  
lax Habit, and principally in Autumn.

*. Mufgrave* says, the *Arthrtiic* Matter is cough’d up inviscated  
aS it were in this Phlegm, insomuch that he has known several:  
*gouty* People preserved from more dangerous Distempers by this  
Discharge, when regular Fits on the Extremities have heen  
wanting. \_

, This Author imagines, that in a dry Asthma the *Arthritic*Matter is fixed upon the Membranes, Nerves, and Muscles of  
the Organs of Respiration ; and in the moist Asthma, that the  
fame Matter is.mixed with the Serum of the Blood.

Sometimes the Gout appears originally in the Shape of an  
Asthma, with much the same Symptoms aS those which attend  
a genuine .Asthma, from which it is not easily distinguished,  
fill in Process, of Time the *Arthritic* Matter falling upon the  
Joints sets the Lungs at Liberty.

The Prognostics in an *Arthritic* Asthma are different from  
those in a genuine Asthma ; for whereas in the latter young  
Men are said to be cured with Difficulty, and old ones not at  
all ; in the former. Patients are more easily relieved, more  
frequently freed, from it, and sometimes so as not to return  
again. However, the dry Asthma is much the most dangerous,  
and often suffocates those whom it seizes.

The Cure is to be attempted by Evacuations, or by forcing  
the *gouty* Matter upon the Extremities. Amongst Evacuations  
Bleeding is most proper for Pletheric People, and Purging for  
such as have indulged themselves in eating.

When the Strength will permit, take mine Ounces of Blood  
from the Patient; and soon aster give a Clyster. The next  
Day give a Purge of Aloes, Pilulae Cochise, or some such Ca-  
thartic, without any Paregoric at Night after its Operation.

After these Evacuations, Spirit of Hartshorn, Flowers of Sal  
Ammoniac, and such-like Volatiles, are of great Service in a  
dry *Arthritic* Asthma.

Take of Gascoign’S Powder, and Conserve of Coltsssoot,  
each one Scruple; Flowers of Sal Ammoniac, half a Scru-  
ple ; of balsamic Syrup, a sufficient Quantity: Make a  
Bolus, to be taken every fifth or sixth Hour in a proper  
Vehicle-

In the moist *Arthritic* Asthma Vesicatories apply’d hetween  
the Shoulders very much relieve the Lungs. Preparations of  
Sulphur, such as the balsamic Tincture of the Flowers of Sul-  
phur, diflodge the Phlegm, and at the same time expel the  
Gout. Gum Ammoniac, Gum Bdellium, Balsam of Peru of  
*Chili,* and of Capivi, produce the same good Effect.

Give twenty Drops of the Tincture os Sulphur in a Spoonful  
of balsamic Syrup, and repeat the Dose every six, nine, or  
twelve Hours ; or preserihe ten or fifteen Drops of the follow-  
ing Balsam in the same manner: . -

Take of the Tincture of Gum Gnaiacnm, and of Balsam of  
Peru, equal Parts: Mix together. - *'N. B.* This is like  
the Balsamum Polychreston.

Though Clysters and Purging may properly enough he  
repeated ‘in a genuine Asthma, in the *Arthritic* Sort 'tis never  
to be prescribed more than once, for sear it should hinder the  
*gouty* Matter from sailing upon the Extremities.

In both the dry and moist *Arthritic* Asthma, the Patient  
must persist in the above-mentioned Remedies, till his Lungs  
are easy, and he respires without Difficulty.

The Cough may sometimes be relieved by the common ex-  
pectorating Medicines, such as Oil of sweet Almonds, Linseed  
Oil,, the balsamic Syrup, or Syrup of Maiden-hair. -

In case the Fit is very violent, and not to be relieved by the  
above-mentioned Remedies, give Oxymel of Squilis, either by  
Spoonfuls at certain Intervals, or in a Dose sufficient to operate  
by way of Vomit, which helps to remove the *gouty* Matter to  
the Extremities ; sor *Moscgrave* fays, he has often known an  
irregular *Gout* made regular by one Vomit.

This Author recommends the Smoke of Tobacco, Coffee,  
and Frictions ; but says Unguents and Liniments, which are  
recommended for a genuine Asthma, are here of no Service.

By way of Preservative, *Mus.grave* recommends, in a moist  
Asthma, Diuretics and Antiasthmatics, aster previous Cathar-  
tics, scapulary Issues, and Vesicatories, especially those made per-  
petual.

\* tn the dry Asthma he recommends Steel Joined with Anti-  
asthmatics, as Gum Ammoniac, *etc.*

. In both Sorts fresh Ain is of great Service , as is also an exact  
Regimen, avoiding Various Kinds os Dint, and keeping to sim-  
pleAliment.

The Piles are of great Relief in this Disorder..

Some Patients breathe with most Difficulty when the Wind  
is in the East or North-eash 'Tin not proper for Patients under  
any of these Disorders to eat Suppers.

*An* **ARTHRITIC CATARRH, COUGH,** *and* **TEAIdNLU-.**

**. . δ᾽ . ’ ~ MOOT. . . -**

Those are most subject to these Disorders who have naturally  
ashed Conformation of the Breast, and a tender Constitution,  
or whose Lungs have been hurt. by a .Plow, Pall, Vociferation;  
or Violent Exercise ; Or those whose Parents were Consumptive  
or Asthmatic.- - — ... .. . . . ι

'Tis Very difficult to distinguish when the Gout is the Couse  
of these Distempers irr fitch as have never had it in their Extre-  
mities ; but as the Distempers of the Parents may give us some  
Light in this Affair, Tis prudent to have them always in View.

When People that have heen used to regular Fits os the Gout  
have them inore seldom or more mild than usual, or the Pit is.  
interrupted by an external Cause, as improper Applications to  
the Part, Cold, *etc.* there frequently comes on a Heaviness of  
the Breast, and Infarction, Shortness of Breath, a Titillation,  
of the Aspera Arteris, a Cough, and thereby a Discharge of  
Matter, at first Very thin, and afterwards more thick; and  
these Circumstances assure us, that the *Gout* is the Cause of the  
Disorder.

Sometimes, though the Fit is not interrupted, these Acci-  
dents will happen, because it is too mild ; and this may snake  
it doubtful, whether the *Clout* is the Cause or not ; but a regu-  
lar Fit returning some time after with greater Violence, fre-  
quently manifests the true Cause.. .. ’ „ \*

Old Men, and those Of a middle Age, are most subject to  
these *gouty* Disorders of the Lungs; but young Men seldom are  
troubled with them.

. Women are. seldom affected with thefe *gouty* Symptoms be-  
fore they have born Children, or before the Catamenia cease.

.. The Spitting is, at first, but small, in Quantity, and that  
thin; but in a little time increases, and that so much, as to  
oppress the Breast greatly, and stuff the Lungs, at the same  
time cansing Hoarseness, and Difficulty of Breathing; -and if it  
lasts for a long time, wastes and weakens the Patient, and at  
last destroys him.

The Gout in the Extremities decreases, as the Spitting in-  
creases.

Though this Discharge by Spitting, provided it is not immo-  
derate, is found generally to be os Service; yet in extreme old  
Age 'tis sometimes too great, so as to weaken, and at last de-  
stroy the Patient; but this seldom happens.

All these Disorders are relieved by a regular Fit falling upon  
the Extremities; and as that increases, these decrease, and  
*vice versa.*

A Cough is the most frequent os all these Accidents, and ge-  
nerally follows a regular Fit; but seldom accompanies it, unless  
in Very *Arthritic* Constitutions, and where the Lungs are at the  
same time weak.

This Cough sometimes ends in a regular Fit, especially if  
assisted by some briik Cathartic, that is capable Of exagitating  
the Blood. ‘ . , :.

Sometimes a Cough is Very troublesome for four or five Days  
before a Fit, and may he looked upon as One Of the preceding  
Symptoms thereof.

A Catarrh is always accompanied with an Asthma and ffa-  
moptoe, which, though it may affright the Patient, is not  
dangerous, provided the Lungs are naturally good, and are hurt  
by no Accident, and a proper Method of Cure is early applied.

These Coughs and Catarrhs have often their Intervals, and  
return by Fits when the *gouty* Matter abounds in the Blood.  
They most frequently happen in Autumn.

These Coughs are generally without any Fever, or are ac-  
companied with a Very slight one ; but if the Patient takes  
Cold, or indulges himself in the Use of spirituous Liquors, there  
is Danger of a Peripneumony, the Signs of which are rhe same  
as those of a Peripneumony from any other Cause. But when  
it appears to he *Arthritic, some regard* is to he had to- the  
Cause.

In all these Bleeding is proper, when nothing contra-indicates;  
in tender and weak Constitutions, it is scarce eVer proper ; in  
those worn out with Age and Diseases, never. In case of an  
Haemoptoe or Peripneumony, Patients seldom recover when  
that is omitted ; but upon these Occasions we must always bleed  
with Caution, for fear of rendering the Constitution too weak:  
to expel *the Gout,* and throw it upon the Extremities.

The next thing to. be done is to purge, which is serviceable  
in all these Disorders; but more particularly in a gross Consti-  
tution, or where the intestines are loaded, and the Patient has  
lost no Blood. Those Purges are best, which exagitate the Blood

considerably, and help to move the1*gouty* Matter. After these  
Evacuations, we must proceed to fuch Medicines as help to re-  
move the *Goiit* from the Lunos, and drive it to the Extremities,  
and with these Pectorals must be joined: For Example,

Take. Alcohol .Martis, and Balsam of Capivi, each half **a**Scruple; Conserve of Hips, one Scruple; Syrup os Malden-  
hair, a sufficient Quantify ; make into a Bolus Or,

Take Flowers of Sulphur, or Benzoin, and Alcohol Martis,  
each half a Scruple ; Gum Ammoniac dissolved, a suffici-  
ent Quantity; make into Pills.

Let this BoluS, or these Pills, be taken twice a Day in a  
Spoonful of Balsamic Syrup, drinking aster it a Draught of the  
Pectoral Decoction, provided there is no-Suspicion of a Fever.  
Let the Patient also take a littie Os the ssme Syrup frequentiy  
every Day. \*

**Is** a liquid Form sis more agreeable.

Take of the Syrup Of Colts-foot, or Maiden-hair, half an  
Ounce; Tincture of Sulphur, ten Drops; to which,  
when well miked, add of the Powder of Olibanum, and  
Alcohol Martis, each half a Scruple.; Hyflbp-water, two  
 Ounces and an half; use as a Draught.

Instead of the Tincture of Sulphur, the following Medicines  
may he taken in their proper Doses..

Anisated Balsam of Sulphur, or Balsam of Sulphur prepared  
with Turpentine, Balsam of CapiVi, of *Chili,* of *Gilead,* and  
*’‘thzt os Peru. ' ' ' ’ .*

*’ ‘ Mus.grave* fays, when the Disorder has been inveterate, he  
‘has frequently given, with great Success, the *Peruvian* Bark,  
in order to prevent too great a Colliquation of the Blood. .

Pectorals either in the Form of Troches, Eclegmas, *etc.* are  
proper to relieve the Cough. ’

It after three or four Days Use of these Medicines, no  
Signs os the *Gont* appear in the Joints, apply to the Part it  
usually affects, the Cephalic Plainer, either alone, or with an  
equal Quantity of Burgundy Pitch, or the Green Cerate.

’ ' But if these do not answer the End proposed, and the Lungs  
are not relieved thereby, more stimulating Applications must be  
used, as acrid Cataplasms, and Vestcatories.. But in the Use  
of these, it must be observed, the weakest are always to be  
tried ; nor are we to use the most severe, unless, the Patient's  
Strength will permit them.

By way of Preservative, the Patient should have Issues Open-  
**ed** in the Back ; should contrive to breathe an Air that is dry,  
and agitated by the Winds; and should direct all his Endeavours  
**to** procure a regular Fit of the *Gout* at proper Intervals.

Is this Method is omitted, or negligently pursued, the Cough  
grows worse, and the Body becomes emaciated; the Matter dis-  
'charged by the Lungs, which was at first thin, grows more thick,  
and more difficult to cough up, and sometimes bloody. Hence the  
Lungs are exulcerated, .and the Patient dies of a Consumption.

In an *Arthritic* Peripneumony there is much more Danger,  
arid care must be taken in the very Beginning, or else it will  
- afterwards he in Vain. Therefore immediately let the Patient  
lose some Blood, a few Honrs after give a Clyster, and the  
next Day a Purge, let the Patient also take, every Hour, Oil  
of Sweet Almonds, or Linseed Oil in the Form of a Linctus.

Emulsions and Decoctions, that.are too cold, must be avoided ;  
and if there is any Appearance of the *Gout* in the Joints, or  
any Hopes of bringing it thither, *Mufgrave* advises Medicines  
which will promote it'. He therefore recommends, from re-  
peated Experience, Diaphoretics, and such external Applica-  
tions as are likely to bring the *Gout* into the Extremities, con-  
trary to the Opinion of *Sydenham,* which see in the above  
Quotations from that Author.

**ARTHRITIC CONSUMPTION.**

When the *gouty* Matter is repelled by any external Cause,  
and driven upon the Lungs, or is invited thither by the Weak-  
ness of the Part, the Patient is first seized with a Heaviness in  
the Breast, Difficulty of Breathing, and Hoarseness ; then he  
begins to spit, first a thin Phlegm, which, by Degrees, grows  
thicker: In Process of Time his Flesh grows flaccid, he wastes  
by Degrees, and loses his Strength in proportion aS the Dis-  
charge from his Lungs increases. Mean time, there is *Do gouty*Tumor, or Pain, in the Extremities, or, at most, but Very  
littie, and that of a short Duration. The Paleness os-his Face,  
and an universal emaciation, daily increase ; and .the violent  
Cough, which attends it, sometimes brings on a Spitting of  
Blood. At last, an Hectic Heat comes on with a quick Pulse, and  
dry Skin, especially in the Evening, which is succeeded by sym-  
ptomatic Sweats. So’ that atR last the Patient is worn out by  
a violent Cough, great Spitting, colliquative Sweats, obstinate  
Diarrhoea, or, is there i, no Diarrhoea, Swelling of the Feet.

A genuine Phthisis generally seizes upon young People ; but  
that which is *Arthritic* rarely affects any but those who are old.

**Women however are subject to it when they Cease to breed,  
and. the Catamenia leave them..**

An *Arthritic* Phthisis is generally Very chronical and stow, and  
is attended with an Hectic Fever only in the last Stage ; where-  
as a genuine Phthisis is accompanied with an Hectic Heat from  
the Very Beginning, and sometimes it precedes all the other  
Symptoms .

Sometimes a Cough does not end in a Consumption till after  
the *Arthritic* Matter has for. several Years been changing its  
Situation, and falling alternately upon the Lungs, and Extre-  
mities. ......

Therefore, in order to adapt a proper Method of Cure to  
this Distemper, a Physician must carefully examine whet .Ana-  
logy it has with the *Gout.*

In the Beginning of the Distemper, when the Cough is  
troublesome, and a Phthisis is coming on, very good Effects are  
To he expected from Bleeding and Purging, if properly admi-  
nistered; for by these means the *gouty* Matter is sometimes  
evacuated. Or at least removed, from the Lungs; but as  
this Effect is not perpetual, and cannot he depended on, these  
Evacuations must be used with Caution, and confined to pro-'  
per Limits, lest the Constitution should hr so far weakened by  
them, as to be rendered too weak to expel the *Gout.*

After either Bleeding, or Purging, or both, is necessary, or  
without either, if- improper, we must have recourse to Pecto-  
rals, and Remedies calculated to expel the *Gout.* Let the Pa-  
tient therefore take every other. Or every third Hour, a Spoon-  
frd of a Linctus ofrecent Oil of Sweet Almonds, or Linseed’  
Oil, with Balsamic Syrup, Syrup os white Horehound, Syrup  
OfTurneps, or some other expectorating Syrup.

When there are no Signs of a Fever, let him take, with the  
Linctus, a proper Dose of Pilis every sixth or eighth Hour,  
made of *Gaseoigofs* Powder, Alcohol Martis, Juice of Liquorice,  
and Balsam of *Peru. - ,*

The Patient may take, in a liquid Form, ten Drops of the  
Balsam of Peru; or Tincture of Sulphur, in a Spoonful of the  
Linctus; and in the Intervals, six or eight Grains of *Alcohol  
Martis. . . . .*

These warmMedicines must be used in such Doses, and so  
often repeated, as the Expulfiomof- the *Gout* requires, and **the**Danger of the Fever will permit. ...

*" Mufgrave* assures us, he has never observed any great Dan-  
ger from this Method, especially in old *Aephrilics,* who ara  
most subject to this Sort of Phthisis. ' . - ' -

' If the Fever is too much raised, either of its own Accord,  
or .by the Use os warm Medicines, that is, is it runs higher  
than the Expulsion of the *Gout* requires; it must be mitigated  
by withdrawing these heating Medicines, by Clysters, by Bleed-  
ing, and the *Peruvian* Bark, together with such Medicines as -  
are usually serviceable in a Peripneumony ; and, when the Fever  
is conquered, the Patient must return to warm Medicines as  
.much as the Circumstances will admit off. - --- —

Aster these Remedies have been used for two or three Days,  
-or sooner, .if *aexJ gouty* Pain is perceived in the Extremities,  
stimulating Topics must be applied to the Part in Pain, or, if  
there is no Pain," to the Part which used to he most frequentiy  
affected. .....

Opiates, and such Medicines as render the Discharge from  
the Lungs thick, must not he used without great Caution, and  
in very small Quantities.

As soon as the *Gout* is expelled, and driven upon the Extre-  
mi ties, the Patient is surprisingly relieved, and the Lungs grow  
easy in proportion as the extreme Parts become painful. *Muse  
grave fays* he has seen, by this Methed, the Cough made tole-  
rable, the Spitting diminished, and at last both entirely' cured,  
insomuch that the Patient has soon recovered his Colour, Flesh,  
and Strength. - - -

When these good Effects hegin to appear, those Reme-  
dies which expeline *Gout,* and those Topics which invite it  
to the Extremities,, must be. obstinately persisted in, till **the**Lungs are entirely free.

As the Lungs are generally left weak, in order to prevent a  
Relapse, the Steel Diuretic Waters are excellent, as is also a  
good Air; .therefore let them be drank for a Month ; or, if that  
cannot conveniently be done, let half a Pint of Tea be drank  
every Morning for some Months, and let the Patient take **a**Diet-drink - constantly, made with pectoral Ingredients, as  
Ground-ivy, Harts-tongue, Maiden-hair, Fir-tops, Cypress-  
tops, Burdock, Seeds of the Wild Carrot, Juniper-berries, and  
dried Millepedes. Let this be used for the Patient's ordinary  
Drink.

A Maritime Air is much recommended by *Mus.grave,* be-  
cause, he says, the .Sailors .are seldom affected with a Cough,  
and Very seldom die of a Consumption.

\* Riding also is much recommended, and Frictions of the ex-  
ternal Parts, and thofe pretty strong ones, twice or three times  
a Day, as-also .large Issues upon the Bach. *Mus.grave* also  
mentions Chocolate, either with or without the Yolk of an  
Egg, as a proper Food; and cautions particularly against taking  
Cold, and contracting Catarrhs; to guard against which, he

Brdert, during the Winter Half-year, a Decoction th he taken  
twice a Day of Sassafras Wood with its Bark, and the Roots of  
China and Sarsaparilla.

*Aiujgrave* thinks Cyder does Hurt in this Disorder.

*The* **ARTHRITIC QUINsEY.**

*Aetufgrave* fays this Distemper has yet been but very little  
considered by Physicians.

It often feizes the Patient at the very same time with the  
*Arthritic* Pain in the Joints; and frequently follows some little  
tone after a regular Fit.

When it forms an Abscess, which discharges Pus plentifully,  
it supplies the Place of an *Artbnitic* Fit, renders the Pationt  
healthful and chearsul, and frees him for some time from the  
*Gout.*

This Quinsey often ends in a Fit of the *Gent,* by a Transta-  
iron of the *gouty* Matter upon the Extremities, which some-  
times happens by Accident, and sometimes is procured by Art.

This Species of Quinsey thofe People are most subject to,  
that have short and thick Necks, and moist lax and weak  
Constitutions.

Women are not G, often affedled with it as Men; the latter  
generally have it about the middle Time of Life, the former  
after the Meofes heve for forne nine left them ; but in both  
Sexes, thefe whofe Blond is bilious, hot, and thin, are most  
liable to it. .

*Mnfgrave* is of Opinion it never happens to any body, un-  
less when the Blond is full of the *Arthritic* Matter, and ready  
to break out into a Fit. .

Α greater Fever precedes this Quinsey than any other Species  
*of Anomalous Gout*; this is soon after succeeded by a Pain, and  
inflammatory Tumor, in the Fauces, which is sometimes fo  
great as to prevent the Patient from eating, or drinking, or  
takina his Breath without the utmost Difficulty, for three or  
four Days , sometimes a great Quantity of Sallva is discharged  
from the Fauces, the Pationt has no Stools, and the Blood,  
when taken away, appears extremely fray, even more than in  
the reguler *Gout.*

The *gouty* Matter is frequently transferred from the Fauces,  
and falls upon the Hand, Foot, Knee, or any other Part of  
the Body.

If a Nausea and Sickness of the Stomach, Heaviness, Tor-  
por, and wandering Pains, heve preceded this Disorder, there is  
great Reason to believe it proceeds from a *gouty* Cause, when  
thofe Symptoms heppen to a Patient who has been used to vio-  
lent regular Fits at stated Times, which have been interrupted  
for a long tone.

The Method of Cute must begin with taking away a consi-  
derahle Quantity of Blond : Presently after give a Clyster ; the  
next Day give a Purge, which must be of the lenient Kind,  
because of the Fever, already too violent, which would be in-  
creased by one more stimulating.

After the intestines are evacuated by one Purge,' they should  
riot , he stimulated any more for four or five Days, for fear of  
inviting the *Gout* to them.

After the Operation of the Purge, apply a very large Blister  
to the Neck; twenty-sour Hours after, apply to the vesicated  
Part Melilot mixed with powdered Cantharides, in order to  
continue the Discharge of Serum.

\* Inciding and aperient Gargarisins are of perpetual Use from  
the very Beginning.

Take of Barley-water, one Pound; Diamoron, four Ounces;  
Spirit of Sulphur by the Bell, as much as the Tongue can  
endure; use as a Gargarisin : Or,

TO Honey of Rofes, add Spirit of Salt or Nitre, so that  
the Tartness he not too great; let it be kept in the Mouth  
a little while, and then discharged with the Sallva.

But nothing is more effectiral, or causes a greater Discharge  
of Saliva, than the following Powder:

Take of Sd Prunella, and Sugar-candy, each equal Parts 5  
mix, and let a Scruple of the Mixture be held in the  
. Mouth Dll ’tis full of Saliva., then spit it out, and about  
a quarter of an Hour, or half an Hour after, let it be re-  
peated, provided the Panent is not asleep.

’Tk of great Service to receive into the Mouth the Vapour  
of a Decoction of the following Plants. Mugwort, Sage, Mar-  
joram, Rosemary, Elder Chamomile, Calaminr, and Fever-  
few.

The next Day but one, or sooner, if the Symptoms run  
. high, as Difficulty of Breathing, and of Swallowing, Bleed-  
ing must be repeated in the Juguler Vein, which is sometimes  
necessary more than once.

If the Throat is in great Pain, apply to st a cataplasm of  
Marshmallow-roots, Mallow-leaves, and bruised Figs, boiled  
in Barley-water, adding mice Ounces of this Magma;

- \ - .

Take Of boiled Onions, one Ounce and an half; Linseed,  
half an Ounce; Cnims Of Bread, an Ounce; Oil of  
white Lilies, a sufficient Quantity’.

Let the Mouth he frequently gargled with Milk and Water in  
equal Quantities. ;

If the Cafe grows so desperate, that the Patient would home-  
diately befuffocated without .instant Help, the Operation of  
*Bronchotomy* must be performed.

During the Ufe of thefe- Medicines, all Methods must he  
used to siring the Gout into the Extremities. Therefore, after  
Purging, let the Patient be permitted to drink Cyder, White-  
wine, Rhenish, and such sort of acidish Liquors,' and some.,  
times pretty freely. . .

Apply to the Joint which used to be most frequently affects  
ed with the *Gout,* a Plaister made of equal Parts of *Oxycreceurn, -*the *Cephalic Plaester,* and *Burgundy Pitch-,* or, if more acrid  
Applications are necessary, stimulating Cataplasms.

Bathing the Feet in Water as hot as the Patient can bear It,  
invites the *Gout* to the Part. " -

As soon as any Tumor is excited, let it he .wrapped in fofr  
Flancl, or double Linen.

As soon as a Tumor appears in the Extremities, that of the  
Fauces generally subsides ; and foon aster Pain, with all the  
Signs of a regular *Gout,* returns, and the Patient soon gets nd  
of the Quinsey.

If a *Vomica* should be formed in the Throat, and break, an  
Emollient and Suppurative Gargarism must be ufed; for Ex-  
ample, of a Decoction of Barley, Liquorice, and Figs; and  
after that, one moderately restringenu Meannme, let the Pati-  
ent live on Gruel, Barley-water, and such sort of thin Aliment.  
In the Day-time, let him abstain from song on the Bed as  
much as possible. When he is in Bed, let bis Head be elevated t  
When he is up, the Legs ought to hang down.

When the Cafe is over, let the Cute be finished with a leni-  
ent Purge.

The Cyder that is drank in this Disorder, should be generous  
and rough, such as that of *Devaesihire.*

*Mujgrave* fays, that of all the Patients be has seen labouring  
under mis Disorder, all but one wereyoung Men.

This Author fometirnes allows **a** Pint or two of Cyder in  
twenty-sout Hours.

**Tie ARTHRITIC HEAD-ACH** *and* **VERTIGO.**

An *Arthritic* Head-ach generally seizes thofe who have been  
*gouty* for many Years, and who, being now past the Meridian  
Of Lise, indulge themselves too much in eating and drinking,  
and, at the same time, ufe but little Exercise, and hence he-  
come plethoric and gross. People that are full of Blond, are  
most of all subjedl: to this Disorder, especially if they have  
shortNecks.

This Head-acti is frequently preceded by the Signs of an ap-  
proaching Fit of the *Gout,* which last *for some* Days, and then  
end in a regular Fit: But the *Gout* then receding, or heing too  
languid, an Head-ach ensues, which lasts for many Weeks,  
and sometimes Months; and at last ends in an Apoplexy, un-  
less the *Gout* is transferred to the Extremities, or, at least,  
removed from the Head ; and, indeed, it seldom ends, except in  
a regular Fit, or an Apoplexy.

The Pain is sometimes not very great, but of long Continu-  
. ance ; sometimes excessive and intolerable, arising almost to a  
Delirium.

Sometimes the Patient complains of the Head-ach ouly; hut  
. ’tis commonly accompanied with a Vertigo, and sometimes  
. with a Noise in the Ears, Difficulty of Breathing, a large  
. Pulse, wandering Pains in the Limbs, and a florid Colour of  
the Face; all which Symptoms vanish as soon as the *gouty* Mat-  
ter, faffing upon the Extremities, causes a regular Fit.

*fists Arthritic* Vertigo exactly agrees with an *Arthritic* Head-  
ach ; the fame sort of People are principally subject to it; it  
has the same Caufes, is accompanied with the fame Accidents,  
and is in like manner cured by a regular Fit. .

A Vertigo is sometimes flight, and a Sign of an approaching  
Fit, ceasing when the Fit becomes regular. But ’tis sometimes  
very troublesome, insomuch that the Pationt can scarcely walk  
without falling.

This in a little' time ends in an Apoplexy, if a regular Fit  
does not happen time enough to prevent it.

*Musegrave* fays, he never keew an *Arthritic* Vertigo terminate  
in an Epilepsy, which is very common in one of the genuine  
Kind.

The Cure must begin with Bleeding in both Cases, that  
of a Head-ach, or Vertigo; especially when accompanied with  
Dimness of Sight, Redness of the Face, and Pulsation of the  
Temporal Artery, which threaten an Apoplexy.' But as in all  
*Arthritic* Disorders, so in this, regard must he had t0 rhe *Gout*so that we are not to bleed fo much, and so often, as in these  
Distempers when the *Gout* is not in the Case. This must there-  
fore he regulated in such a manner, that enough may be taken

away to relieve the Head, and no more, for fear os preventing  
the.Expulsion of the *Gont* to the Extremities.

' Sometimes the *Gout* begins to he felt in the Joints, imine-  
diately after Bleeding.

- If there is any Complaint of Sickness at the Stomach, it may  
he proper to wash it with a Decoction of Tea, or Carduus  
Posset-drink, taken by way of Vomit.,

Purge with Pilulae Rush, , the lesser Pilulae Cochise, or the  
Piluhe ex Duobus, with an Addition of some few Grains of  
Resin of Jalap, Very soon after Bleeding or Vomiting, if that is  
thought necessary. -

In Constitutions which are easily purg’d; a Solution-of Ca-  
thartic Salt in Water, or the *Alford* Waters, are sufficient.

One Purge is not always enough, when its Operation is but  
gentle, or the Constitution is much loaded ; it must therefore  
be repeated in such a manner, as to answer the end of removing  
the *Gout* from the Head to the Extremities.

After Purging, the Patient Very frequently begins to seel Pain  
in the Extremities 5 but if he does not, we must proceed to  
such Medicines as remove the *Gout* into the Joints ; but these  
must be used with great Care and Caution, lest, instead of an-  
swering the Design, they should drive the Blood, and with it  
the *gouty* Matter, more forcibly into the Head, increase the Dis.  
order, and . destroy the Patient. Therefore, we must abstain  
from powerful Chalybeates, and strong Podagragogues, and sub-  
stitute the following CephalicS in their room ; but eVen these  
must not be used, till the Heat has heen much reliev’d by Bleed-  
ing and Purging.

Proper Cephalics, in this Cose, are red Coral, simple or com-  
pound Powder of Crabs-claws, and white Amber : These, and  
such of this Class as are yet milder, may be taken by them-  
selves, or made into the Form of a Bolus, with Conserve\* of  
Rosemary-flowers, Flowers of Betony, Syrup of Stoechas,  
simple Syrup of Piony ; or they may he made into Pilis, with  
Extract of Gentian, together with Powder of Dittany *os Crete,*Castor, or Piony-seeds.

After plentiful Evacuations, three or four Grains of Salt of  
Steel, or even *Alcohol Martis,* may be added to these Medi-,  
cines, and repeated every six or eight Hours.

After each Dose, let the Patient take a Draught of a Julap  
made of the simple and compound Waters of black Cherries,  
Lime-tree-flowers, and Piony, with compound Spirit of La-  
vender : Let him take, once in the Intervals, a few Drops of  
the Tincture of Amber ; or, if the Fever does not run high,: of  
the Spirit of Sal Volatile Oleofum, or Hartshorn, in an Infu-  
sion of the Tops’ of Sage, Rosemary, or Tea.

' To these may he added the Species Diambras, without the  
Perfumes, or its Tincture.'

- Coffee is very' good, especially if made with an Infusion of  
some Cephalic- Plant. . - .

In like manner in an *Arthritic* Vertigo, after Evacuations,  
the following Medicines may he taken alone :

Powder of Rue-seeds, Male Piony, Castor, Valerian-root,  
Wild Cypress, Winter’s-bark, Orange-peel, compound  
Powder of Rosemary-flowers, Species *Diamosehi dulcis;*or some of these may he made into an electuary, with  
Conserve os Piony-Howers, or Syrup of Piony, or Syrup  
of Nutmeg-candied in the *Indies. ..*

. Pills may also be given, made of the *Pulvis deGutteta* and  
*Ens Vineris,* with Extract of *Calamus Aromaticus,* or a Solution  
of *As.a-fcstida.*

To these may be added Salt of Steel, or Salt of Amber; and  
these may he taken every six or eight Hours, in a moderate  
Dose; that is, in such a manner that the Spirits may he reliev'd,  
and not disturb'd thereby.

Aster each Dose of. these, a Draught of the Cephalic Julap  
should be taken. -

in the Intervals let one Dose of the above-mention'd Insth.  
.lion be taken, with some Drops of Tincture osAmher.

Fetids, apply'd to the Nose, are also os Service, aS Spirit  
of Sal Ammoniac, with Salt of Tartar, Castor, and *Asia.,  
foetida.*

Things of a grateful Flavour have also sometimes a good  
Effect.

*Musgrave* advises to anoint the TempleS and Nostrils with  
the following Balsam : - -

Take of the Chymical Oils of Rosemary, Lavender, Mar-  
joram. Thyme, Origanum, Hy stop, each one Scruple;  
Oils of Cinnamon, Oranges, Angelica, and Rue, each  
one Dram ; Oil of Amber, half a Dram; Oil of Cloves,  
half a Scruple; Oil of Nutmegs, by Expression, four  
Ounces; Ambergrise, two Drams; Musk, one Dram;  
Balsam of *Peru,* Drams:" Let the Amhergrise and  
Music be laid upon a Marble. let them he moisten'd with  
the Olis, and levigated with the Stone sor that Purpose,  
till they are reduced to a Masa of the Consistence of Poma-  
tum. To this Mixture add some *Ptruvian* Balsam, and

*i-* continue theLevigation for half an Hout: Thenadd the Oil  
’ os Nutmegs by Expression, and continue the Trituration  
for an Hour longer. - Let this fragrant Cephalic Balsam he  
preserv'd for Use in a Phial.

After these Cephalic Medicines have heen taken sor a Day Or  
two, in either of. these Disorders, apply to the Joint common- -  
Iy affected some stimulating Topic, as a Plaister, made of two  
Parts of Gum Caranna, one Part of yellow Wax, and a suffi-  
cient Quantity of the Oil os Worms: But if this is not suffi-  
cient, and the Disorder of the Head still remains, or increases,  
we must proceed to Sinapisms, Vesicatories, Flannel, and Liga-  
times. '

*- Mus.grave* is of Opinion, that cooling Emulsions and De-  
coctions. Narcotics, cooling Embrocations, Epithems, and  
washing the Head with cold Water, are dangerous in this Case,  
tho’ they may be of Service in Disorders of this Kind from  
another Cause.

He also disapproves of applying Leeches to the Haemorthoi-  
dal Veins, for fear of an Inflammation or Fistula.' \_ -

By way of Precaution, and to hinder a Return of the Dis-  
order, it would be proper to apply a Blister sometimes to .the  
Neck or Arm, to bleed in the Spring, to take a Purge every  
Month, and always to avoid being costive, and to keep the  
Feet Very warmly cloath’d. . . .

Those that are subject to these Disorders, should religioufly  
abstain from Ermines, from steeping after Dinner; and from  
herd Drinking. ' , ,

*An* **ARTHRITIC APoyiExY.**

*Gouty* People, who have been so sor many Years, have  
short and thick Necks, who begin to grow old ; and particularly  
those who indulge themselves in Eating and Drinking, and  
become plethoric, after leaving off some accustom'd Exercise,  
are inwst subject to an *Arthritic Apeplexy* ; which happens when  
a regular i it of the *Gout* is interrupted, or deferred too long,  
or else is not sufficiently Violent to carry off the *gouty* Mat- -  
ter. \_

The Cure of this Distemper is different from that of **a**genuine *Apeplexy.*

The Signs of an approaching *Arthritic Apoplexy* are, a Head-  
ache or Vertigo, or both together; fife Head is heavy, the  
Face is bloated and red, the Tongue faulters often, the Motions  
of the Patient's Body are disorderly, and his Steps unequal;  
and if the Disorder increases, he is suddenly deprived of all  
Sense and Motion, and his Eyes become greenish, as if he was  
dead: A Stertor and Snoaring, and all the other Symptoms of  
a genuine *Apeplexy,* attend this, so that its *Arthritic* Nature must  
be discover’d by adverting to the State *os* the Constitution,  
and considering what Sort os *gouty* Paroxysms have preceded.

Tight Bandage about the Neck Very much contributes to  
keep the Blood in the Head, and cause an *Apoplexy,* especially  
when People are full of Drink : These People, therefore, when  
they go to Bed, should have the Collars os their Shirts unbut-  
ton'd.

An excessive Use of Opiates and Errhines contributes much  
to this Disorder; as does also whatever repels the Gout from  
the Extremities.

The Spring and Autumn savour the Production of an *Ar.,  
thritic Apoplexy.*

If a right Method of Cure is apply'd, many Patients recover  
of this Distemper; and afterwards enjoy a much better State of  
Health, then those who recover of a genuine *Apeplexy,* espe-  
cially if they become regular, temperate, and sober.

The proper Method of Cure consists in relieving the Brain  
by Evacuations and Revulsion, and removing the Gout to the  
Extremities; at the same time removing all Obstacles which  
may prevent a regular Fit, as Shoes or Stockings that are too  
tight- Bleed therefore immediately, to twelve, fourteen, or  
sixteen Ounces, according to the Strength and Constitution of  
the Patient.

Immediately aster give a Clyster of human Urine; or the  
common Decoction for Clysters, with common Salt, or rosated  
Aloes, Or some other stimulating Ingredients. \*

Soon aster this give a stimulating Purge, as half a Dram  
or two Scruples of the Countess of *WarwicPs* Powder; or  
else one Scruple of the Extract of *Rudius*; between six and  
ten Grains of the Resin of Jalap; of Elixir Proprietatis, **a**sufficient Quantity to form into Pills; or three Ounces of the  
purgative bitter Decoction; or one Ounce, or an Ounce and.  
an half, of the Syrup of Buckthorn.

If the Purge does not work briskly in three or sour Hours,  
let a Clyster be repeated.

During all this time let the Patient he kept in an erect  
Pocture.

' After Purging repeat Bleeding, either in the Arm or Neck.  
Cupping betwixt the Scapulae is of great Service.

- After these Evacuations, apply to the Joint that has lately  
been, painful, . some powerfully stimulating Plaister, as, sor  
Instance, that made of *Burgundy* Pitch and *suenice* Turpentine ;

or the CephalicPlaister, with Euphorbinm : Mean time keep **the**whole Limb extremely warm with Flanneis.

*. Mus.grave* relates, thut he has known exceeding great Effects  
from keeping the Feet a considerable time in Water, as hot aS  
the Patient could possibly bear it; for by this means he was  
saved, tho’ before, in all Appearance, expiring.

- Is this Method does not relieve the Patient, apply a Blister  
to the Neck, to the Sinciput, or all over the Head, aster it has  
heen thawd, and let it lie on four or five Days. \* .

' Apply also Blisters to the Ankles, if the Gout used to appear  
principally in the Feet; or to the Arms, if the Hands were,  
usually affected.

Is the Patient is extremely ill, a Cupping Glass should be  
apply'd to the Neck, or to that Part Of the Head where the  
Lambdoidal and Sagittal Sutures meet, if the back Part of the  
Head is most affected ; .or, if the fore Part of the Head, to **the**Place where the Sagittal and Coronal meet.

But is none of these Applications are thought necessary for  
. the Head, it should at least be shaved, and rubb'd well, in  
order to relax the Skin; and a Cumin Plaister should be  
worn upon it, in order to increase the Personation of the  
Part.

But is the Disorder still continues, it will be serviceable to  
make use of such ErrhineS as draw the Serum from the Nose,  
without making the Patient sneeze, which in this Case is dan-  
gerous. .- - ...

The Patient should srequentiy chew in his Mouth acrid  
Plants, which cause a great Discharge of Saliva : For this Pur-  
Pose,

Take of the Shavings of Horse-radish, and bruis'd Mustard-  
seed, each half a Dram ; Powder of Pellitory of *Spain,*

- one Dram : Mix up with Honey, and put the Whole in a  
Piece of Mullin. - This the Patient must squeeze between  
his Teeth, and discharge the Spittle aS 'tis generated in his  
Mouth. . E

Mean time, whilst these Evacuations are making, the Pa-  
tient should frequently take a Dose of Spirit of Sal Volatile  
Oleosum; or Spirit of Hartshorn succinated, with a Cephalic  
Julap; or a Dose of Pilis should be taken twice or three  
times a Day, made of the *Pulvis ad Guttetam* and Castos,  
reduced to a Mass fit sor Pilis, with Oil of Amber, and a Solu-  
tion of *Afa-fcetida.*

These raise the Spirits, at the same time that they contribute  
- to expel the Gout; but should never he used without plentiful  
Evacuations preceding.

If these Remedies are not sufficient to bring the *Gaut* to the  
Extremities, we must proceed to the most stimulating Cata-  
plasms. ,

AS soon as any Tumor or Pain appears in the Extremities,  
we must endeavour to keep it there, and hinder a Retrocession.  
To this End, a Blister must be apply'd to rhe Part, which must’  
be. kept running a considerable time by Melilot, mix'd with  
Cantharides, if necessary. Mean time let the Part be kept ex-  
tremely warm, with Flannel and Woollen Rollers ; and let the  
Foot, if that Part is affected,, be kept all Day in a declining  
Position. . .

Violent Frictions of the Extremities, apply'd twice or thrice  
a Day, are of the utmost Importance.

The Gout appearing in the Extremities is the most happy  
Circumstance that can happen; and then, and not..till then,  
some gentie Podagragogues may be given, that is, when we  
perceive the Course os the *gouty* Matter to be alter'd, and there  
'' is no longer any Danger of driving it more forcibly upon the  
Head.

The Countess of *Kent's* Powder, in the Quantity of a Scru-  
ple, every six or eight Hours, is a proper Medicine in this Cose.  
And to this may be added, once a Day, or, in a phlegmatic  
Constitution, twice, five Grains os *Alcohol Martis.*

But if by any means the *Gout* should be repell'd from the  
Extremities, or the Head should suddenly grow worse, these  
' Podagragogues must inimediately be left off, and recourse must  
be had to stimulating topical Applications, and the above-men-,  
tion’d Medicines, which contribute gently to raise fee Spi-.  
tits.

During the Use of these Remedies, let the Patient's Diet be  
extremely low ; let him live, for Example, on Chicken-broth,.  
Gruel, or Panada, with Currans or Raisins ς Chocolate may  
sometimes be allow'd, instead of small Beer let the .Patient  
drink Cyder, Wino and Water, and Infusion of Tea, or Sage,  
or of Clove-gilly-flowers.

Nothing is more dangerous than full Meals, especially in the  
Evening.

As to Stools, let the Patient be. kept in a moderate way;

. sor too many may invite the *Gout* to the Intestines, and Costive-  
ness opprestes the Head.

By way of Prevention, nothing is more serviceable than  
Scapulary Issues, Country Air, and purging Spring and Au-  
tumn, and bleeding in the Beginning of *Octobers* in strong  
Constitutions.

**But the best Preservative is so keep the *Gelet* regular**Fits. - .'

. There is another Sort of the *Arthritic Apoplexy,* which *Muse  
grave* calls Symptomatic, whose Couse is tn the Stomach and  
Intestines.' This, he says, must he cur'd by Vomiting and  
Purging, by Medicines exciting the Spirits, and which expel  
the Gout.

*The* **ARTHRITIC PALSY.**

The *Arthritic* Matter, sometimes sailing upon the Origins of  
the Nerves, causes a Palsy os the respective Parts to which they  
helong; and that more particularly in such *gouty* Constitutions  
as incline to a Plethora. ..

A moist and fenny Air, a sedentary Life, a bad Regimen, a  
frequent Use of Opiates, and of Spirituous Liquors, immode-  
rate Venery, Cold, too frequent Use os warm Medicines in  
hot and bilious Constitutions, or whatever hinders the *Gout*from selling upon the Extremities, or repels it when there, are  
the usual Caules of an *Arthritic Pals.y. »*

The Nerves os theTongue are sometimes affected, and thep  
the Patient loses the Use of his Speech, or can utter but half  
Words confusedly.

. If that Branch of the *Par Vagum* that belongs to the Sto-  
mach is affected, the Patient loses his Appetite and Digestion,  
and has an Aversion to all Aliment; insomuch that he daily  
wastes, and insensibly becomes tabid.

This Case *Mus.grave says* he has known happen *inArthri..  
tic* Constitutions, where there has been also a Plethora; and  
from these Causes first an *Apoplexy, then tc Pals.y.*

When an *Arthritic Palfy* happens in bilious Constitutions,  
especially when it follows a bilious Colic, the Patient loses his  
Appetite, his Flesh wastes, the Skin does not perspire, but is  
dry, and of an ictericious Colour as are particularly the Whites  
of the Eyes. -

. Sometimes one Side only, or one Member, is affected, as the  
Tongue in particular: Sometimes the Distemper is aecompany'd  
with convulsive Motions, and 'tis sometimes without : Some-  
times the Palsy is imperfect, and only renders the Parts it seizes  
on unwieldy, and unfit for Motion; sometimes 'tis perfect,  
and renders them entirely useless and immoveable.

Tins Disorder is Very difficult to be cured, especially when it  
succeeds an *Apoplexy* ; and, if the *Apoplexy* returns, 'tis general-  
ly fatal; however, if a right Method of Cure is pursued, **the**Patient sometimes recovers, heyond all Expectation.

. If the Pulse is frill, and the Patient inclin'd to a Plethora,  
begin the Cure by Bleeding, either in the Arms or Jugular  
Vein, or by Cupping, with Scarification upon the Back.

A few Hours after Bleeding give a Clyster. Purging is per-  
petually useful; but the Purges should be of the stimulating  
Kind, capable of exagitating the Blood, and removing the  
*Gout* to the Extremities.

As foon as ever an *Arthritic Payy.soce.es* the Patient, apply  
to the Joint, which used to be most affected with the *Gout,* the  
Apoplectic Cataplasm of *Bares, Fulleofs* Cataplasm *os* Horse-  
radish, or some other equally stimulating.

As soon as the Tendency *of* the *gouty* Matter is chang'd from  
the Head towards the Extremities, and not before, the Patient  
may take some gentie Podagragogues; as *Gafcoigofs* Powder, or  
the Purple Powder, twice or three-times aDay, with a Draught  
Of a Cephalic Julap.

' AS soon aS any Tumor appears in the Extremities, apply to  
it a Vesicatory. " ': - . -

'Tis proper also, in this Disorder, to apply an Epsfpastic to’  
the Neck ; and to the Head, after shaving, the Cumin Plaister,'  
or some other drawing Plaister; but not till afmr general Eva...  
cuations. . ’ " si. . ' . -

Gargarisms, which cause a great Discharge of Saliva, must.  
he used ; and a very thin Diet must be injoin’d.;

Mean while, let the Patient take, from time per time, a Dose  
of Volatile Spirits, Tincture of Castor,, or os Amber, in a  
Draught Of a Cephalic Julap, or an Insuston of Rosemary or  
Sage.

When the *gouty* Matter is much fix'd upon the Nerves, 'tis  
necessary to attenuate it by Decoctions os Guaiacum, and of  
the Wood and Bark of Sassafras, by Preparations of Steel, by  
Frictions, Baths, Embrocations, proper Cloathing, Liniments,"  
Cerars,/and Plaisters, as in a genuine Palsy.

*Mus.grave* recommends a Decoction *of the Bark,* with Che-,  
lybeates, as a Thing he has known of great Service.

*- Mufgraue* also directs us to examine diligently, whether -the .  
Patient is het or cold; whether the *gouty* Poison is accom-  
pany'd with a Viscidity of the Blood, or not ; or whether 'tis ...  
join'd with a Redundancy *of* Bile, as in the Case of an *Arthri-  
tic Palsy,* immediately following a bilious Colic, of which he  
gives an Instance. -

In the last-mention'd Cafes, warm Medicines, taken in  
Quantifies, for any time, make the Patient unquiet, feverish,  
and deprive him of Sleep; nor is he, in the least, rais’d or  
made stronger by their.Use; but, on the contrary, much  
weaken'd and disturbed.

r .In such Cases, therefore, the Author recommends *German*Spaw, or *Bristol* Water, as Things of great Efficacy, if drank  
fresh ; and, he -says, other Chalybeate Waters may have the  
simv. good Effects : And if Chalyheates are added to these at pro-  
per Times, and in proper Doses, he says, the Cure of such Dss-  
orders is perform'd Very agreeably; and with great Certainty.

By way of Prevention, nothing has so good an Effect, as  
procuring regular Fits of the Gout; for the more the Extremi-  
ties are in Pain, the less the nervous System is affected.

- Therefore, as soon as there are any Signs of the *Gont*abounding in the Blood, if nothing contra-indicates, let the  
Patient take a Drastic Purge ; and afterwards, twice or three  
times a Day, five Grains of *Alcohol Martis.* A few Days after,  
apply some stimulating Topic to the Joints, in order to invite  
the *Gout* thither.

» - Mean time, the Patient must never be suffer'd to he costive.

He must also keep Issues perpetually running in the Arms, or  
upon the Back.

**IRREGULAR ARTHRITIC PAINS** *in the* **BODY ; ARTHRI-  
TIC OPHTHALMY, ERYSIPELAS,** *and* **ACHORS. -**

'Tis common enough for a *gouty* Person to feel Wandering  
Pains in the Back, Loins, Scapulas, Sternum, and external  
Parts of the Head, winch affect him for some time, and  
then remove elsewhere ; insomuch that these Pains are fre-r  
quentiy mistaken for a Rheumatism. But sometimes these Pains  
remain a considerable Time in the same Part, and give the Pa-  
; tient a great deal of Uneasiness ; and this happens frequentiy  
in the Loins, affecting the Patient as is he had the Stone in  
his Kidneys. The Seat os the *goaty* Matter upon this Occa-  
ston is the Spina Dorsi, and its Membranes ; and it seldom  
happens hut in Constitutions worn out with Age and the *Gout,*and not able to throw out a regular Fit. - \

Y’ The *Gout* will also fall sometimes upon the Tonica Adnata  
of the Eye, and caufe an *Ophthalmia,* which immediately Va-  
nishes as soon as A regular Fit os the *Gout* appears in the Extre-  
inities. ' . ’ - Ἀ - - - .

*“ Mufgrave* relates, that he knew" an old *gouty* Patient, who  
had the superior Palpebra in Very great Pain for a whole Month  
and more, which disappear'd upon a Fit of the *Gout* imme-  
diately following. - - ; .... .. . . - )

' The same Author says he has known an Erysipelas tenni-  
nate in the *Gout* ; from whence he infers, that it. was caus’d

. by *Arthritic* Matter.

In some *Arthritic* Constitutions, when the Fits are too mild  
and interrupted, the *gouty* Matter, is evacuated by the Ears,  
and in others by *Achores* only, without any Appearance of it  
in the Joints. ' . . :

In all thefe Cafes, the Danger as much less than when the  
*gouty* Matter fixes upon the internal Parts, and affects any of  
the Viscera ; and they are attended with these Advantages,  
that they- Very seldom recede, and san upon the .Vifcera ; but  
are Very often transferred to the Extremities, and cause a regu-  
lar Fit; Ἰ .. X

The same Method of Cure is requir'd in all these *gouty* Dis-  
orders. - ... . ... .. - ... so ... si sc so

The first Step to be taken therefore, if they are violent, is  
to bleed ; and after that to give an Aloetic, or some other Dra-  
stic Purge, that *scae Arthritic* Matter, may in part be evacuated,  
. and in part be removed to the Extremities. . ’ : - 'i

After these general Evacuations, *Mufgrave* advises to do no  
more, unless the Pain is Very violent ; and in this Case, the  
- Patient may endeavour to evacuate the *Arthritic* Matter, or to  
remove it to the’Joints, by Sweating ; and to this End let him  
he well cover’d with Bed-cloaths ; or let him take Spirit of  
Hartshorn, Venice-treacle with Gascoign's Powder, the Pul-  
**vis** ruber Exoniensis, or some such Cordial with Rosemary  
Poffethdrink. \_ .

These Cardises are proper in fixed or wandering Pains,  
or in at. Erysipelas. .. - -

" If an *Ophthalmia* should grow worse after Evacuations,  
*Mufgrave* advises the following Collyrium : . „

Take the 'White of an Egg, beat it, dilute it in Rose-  
water, and add some Grains of Camphire ; make into a  
Collyrium, a few Drops of which'must be Put.-into the  
..... Eyes eVery.Morning, and let*B* Linen Cloth soaked -in it

. be. apply’d to. the Eyelids twice or thrice a Day. Lapis  
Calaminaris, or Lapis Tutiae, may Very properly he added  
to the Collyrium, provided they are duly prepared, i

As for the above-mentioned Achores, they are to he treated  
in the same manner as others, which are not from a *gouty*Cause ; but *Mufgrave* says thesi are so safe, .and even useful,  
that he would not advise" any Attempt to procure a Pain in  
the Extremities upon this Account.

**An ARTHRITIC EPIPHORA, wndTOoTH-ACH.**

***.. Job. Steph. Strobelbcrgcrus ywrots B Traiise De Podagra  
Dcntiurn, . \ ... : -.***

’. Sometimes the *goiety* Humour salis upon the Glands **in the"**Orbits of the Eyes, and causes a Discharge of sharp Serum from  
them:

And sometimes upon the Gums and Membranes which sur-  
round the Roots of the Teeth, and causes violent Pain. These  
sometimes happen aster the Gout has been repell’d from the  
Extremities, and sometimes end in a regular Fit.

Is these Disorders hecome considerable, bleed in the Jugular  
Vein rather than in the Arm. Then give a Drastic Purge the.  
next Morning. After this, lay an Epispastic to the Neck ; and  
when that is taken off, apply some stimulating Ointment **to**the Vesicated Part, in order to continue the Discharge.

But if,, notwithstanding these Remedies, the Gout continues  
in the Part, we must proceed to use those Medicines which  
force it, and those Topics which draw it- to the Extremities.

In an Epiphora, *Mus.grave* recommends Woman's Milk;  
which he advises to be put into the Eye ; or a Collyrium of  
the Mucilage of Flea-bane and Quince-seeds made with Rose-  
water, or Plantain-water-, with the white Troches ofRhases;

In case of Pain in the Teeth, the same Author advises a Gar-  
garism, that will cause a Discharge of Saliva.

. If 'tis absolutely necessary to pull out the Tooth, the fame  
Author advises to gargle the Mouth with Spring-water, Honey  
of Mercury, and common Salt ; and aster this he directs that  
the Tooth should be put into its Place again, which he says  
will hecome more useful sor having been drawn.

**MISCELLANEOUS OBSERVATIoNs,**

When the *Gout* seizes upon any os the Viscera, or other  
Part, it exactly imitates the genuine Distemper which the Part  
is subject to, so aS to be distinguished from it'wlth Difficulty.

The *Gout* seldom destroys any body without becoming first  
anomalous. ..

People are frequentiy for a long time in a bad State of  
Health, and complain os Pains in the Shoulders, Breast, Back,  
and Loins, like those of the Rheumatism , sometimes of Dis-  
orders in the Head, like Hysterics, and at other times of Dis-  
orders that seem to he Scorbutical ; all which at last terminate  
in the Gout.

ς *Mufgrave* calis that *Gout Symptomatic,* which derives its Ori-  
gin, and proceeds from some other Distemper, as the Rheu-.  
matism. Venereal Disease, Dropsy, or Scurvy.

. Having given an Account of the Treatment due to the *Regu-  
lar,* and the several' Species, of the *Anomalous Gout,* it remains  
that I say something with respect to the Causes of this obstinate  
and excruciating Distemper. „' -.

*Sydenham,* as we see above, and after him *Boerhaave,* and  
most Authors who have written intelligibly on the Subject of the  
*Gout,* are os Opinion, that its original Cause is *Indigestioni*And yet this Disease, when not hereditary, generally attacks  
those whose Constitutions are robust and good, whose Appeil  
rites are keen, and who have at least the Appearance of di-  
gesting their Aliment Very regularly. Hence it may be ashed.  
How it happens, that such People have the *Gout,* whilst others,  
who are os a weak Habit, whose digestive Organs, are lax and  
unbrac’d, and whose Digestions are manifestly performed with  
less Vigour, should be so fortunate as to escape it;

- In order to reconcile these seeming Contradictions, and give  
a clearer Idea of the *Gout,* than most People seem to have  
form'd, two Things are principally necessary to be adverted to.

The first is. That there is in animal Bodies *a decreasing  
Series of Vessels* destin'd to convey Juices to the several Pans.  
Physicians know what I mean by a *decreasing Series of Vessels*but that I may not he mistaken by others, *I* shall explain it  
farther.

- Suppose, then, the Vessels whose Diameters are largest, are  
destin d to convey the red Globules of the Blood, (and together  
with these, all the other Parts of the circulating Fluid) which  
are either reconven’d to the Heart by correspondent Veins,  
when they arrive at Vessels whose Diameters are too. small to  
receive them ; or, perhaps, being divided into several Parts,  
till at last they become transparent, circulate forward in' the  
next Series of Veffeis, which we may conceive adapted to con-  
vey Serum. The next may possibly he capable os receiving  
Lymph , the next a Fluid still finer, till at last the most mi-  
nute Vessels in the Body may convey a-Fluid consisting of finer  
Particles than we can form any Idea of, aS not being the Objects  
of our Senses.

That this is in some measure he Cafe, is certain, hecauherif  
**red** Globules of Blood were to circulate in the Humours **or**transparent Membranes of the Eye, Vision could not be per-  
formed ; as we find it is not, when thro' an *Error Loci, as  
Boerhaave* very properly calis it, fuch Particles get into the'  
Veffeis of the Parts not adapted naturally to receive them.. - - -  
Thus’, also, if a Part furnish'd with Vessels which convey,  
these red Globules is wounded, red Blood is extravasated ; but  
wound a Tendon, and nothing but a fine *Lymph* or *Ichor* shall  
he discharged. . . .. -

The second Thing I would have attended to is, that a great  
deal of earth resides in the circulating Fluid, which I believe

nobody will dispute. It will he of some Importance in out  
present Inquiry to trace this Earth from its Source, the  
Ground to its Entrance into the Blond, aster having observ’d,  
that human Bodies, as well as those of other Animals, are  
nourish’d either by Vegetables, or by Animals, which gain their  
Sustenance from the Soils - - - - - - -

In the Ashes of all Vegetables we find a great Quantity of  
pure Virgin Earth, which, when perfectiy freed from the ad-  
hering Salts, is neither capable of being alter’d by Fire, nor  
dissolv’d by Water ; and yet, withput such a Solution, it is  
inconceivable how this Earth could pass thro’ the extremely  
minute Pores of the Roots, circulate in the Sap, and contribute  
to the Formation of the Vegetable. It is therefore highly pro-  
hable, that this Solution is brought about by some means,  
which it is not out Business at present to inquire into:  
But, for Information in this Particular, see the Article  
**ACETUM.**

When Vegetables are taken into the Stomachs of Animals,  
the Earth which they contain, or at. least a Part of it, must  
necessarily undergo a second Solution, otherwise it could not  
enter the minute Orifices of the lacteal Veffeis, circulate with  
the Fluids, and ultimately be converted by the vital Powers  
into Nourishment for the solid Parts of Animals .. And that it  
. does actually enter the Lactsais, circulate with the Fluids, and  
is converted into Nourishment, is certain, hecause we find a  
great Quantity os this Earth both in all the Solids and Fluids  
of Animals, which is not convey’d thither by Magic.

If Animal Substances are taken by way of Aliment, the con-  
tain’d Earth must undergo a third Solution, perhaps more dif-  
ficult to be brought about then the former two, as the Parts  
of Animals cohere more strongly than those of fucti young  
Vegetables, as are generally us’d in Food.

This Solution of the Earth in Animal and Vegetable Sub-  
stances, is made by the *Powers of Digestion* ; and if these are  
vigorous, and perform their Duties regularly, the Mass of  
Blood is fupply’d "with fresh Chvle, suited to perform all the  
Offices requir’d by the Animal OEconomy.

But if the Powers of Digestion are defective, this Solution,  
is imperfect in proportion ; insomuch that if the'Aliment be  
scarcely dissolved at all, it is either discharg’d by Vomit, or  
passes off by Stool little alter’d, as it happens in a *Lientcry.*

Again, let us suppose the Bile viscid and unactive, and con-  
sequently incapable of completing, by its saponaceous Qua-  
lity, the Solution begun in the Stomach ; so that the Aliment  
is not comminuted sufficiently to supply Chyle fine enough to  
circulate thro’ the Lungs , in this Case, Difficulty of Breath-,  
ing will be the Consequence, as it happens in a *Chlerofis  
(Green-sccknese)* ; and as in this Case the Chyle is farther de-  
priced in a great measure of the Action of the Lungs, which  
was necessary to comminute it, and convert it into good Blood,  
the Blond hence form’d is too gross to circulate thro’ the  
Glands; and the superfluous Water, which ought to be carry’d  
off by the proper Emunctsries, remains in the Mass ; and  
hence Obstructions in the Glands, and Dropsies.

It would, perhaps, he somewhat difficult to trace the All-  
merit thro’ all the different Degrees *of* Solution, and account  
for all the various Disorders caus’d by the Stagnation thereof in  
the different *Scries* of Vessels. It suffices for my present Pur-  
pose, that whenever any Particles of the Blood, that is, of the  
dissolved Aliment, arrive at a Series of Veffeis, whose Diame-  
ters are less than their own, they must there stagnate, unless  
they are capable of being divided into smaller Particles.

Now, with respect to the *Gout,* let us suppofe a Man in full  
Vigour, who eats and drinks with Appetite, and by, the Help  
of due Exercife preserves a Tone and Elasticity in the Organs,  
of Digestion, sufficient to dissolve his Aliment effectually. Sup-  
pose also this Person on a sudden leaves off, either in part or  
totally, his habitual Exercise, and that his Appetite does not  
diminish in proportion to the Powers of Digestion. It may  
happen in this Cafe, that the Aliment may he sufficiently com-  
minuted for most of the Purposes of the Animal OEconomy.,  
whilst the Earth is not so perfectiy dissolved as to circulate  
freely thio’ the remote *Series* of Vessels, which convey Juices  
to the exanguious Parts, or Parts which are nourish’d by Lymph,  
Ichor, or forne finer Fluid, such are the Tendons, Ligaments,  
and nervous Membranes, When, therefore, the partially dis-  
solv’d Portions of Earth arrive at very remote Veffeis, whofe  
Diameters are smaller than their own, they there stagnate, be-,  
ing hard and incapable of farther Division, and distend the ex-  
tremely sensible nervous Fibres being also impell’d by the suc-  
cceding Fluid, they are driven against, cut and tear the ner-  
vous fibres, and are productive of that excessive Pain, which  
*gouty* People are too sensible of in the Paroxysms of that Dis-  
temper.

. When a sufficient Quantity of this obstructing Earth has,  
in repeated Fits of the *Gout,* been fix’d npon the Part, the  
Tendons and Ligaments grow stiff and immoveable. and by  
Degrees the obstructing Matter works thro’ the **Integuments,**and appears in its proper and original Form, that of miss or  
*Chalk.*

If this obstructing Matter should he repelPd, or hinder’d from  
fixing on the Extremities, by Design or Accident, it may he  
impell’d upon the nervous Membranes of the more noble Or-  
gatis, and caufe the Disorders peculiar to each respective Part,  
in the manner fpecify’d above.

’ Hence we may understand the Reason why the *Gout* has  
heen in all Ages esteem’d incurable ; that is, because the Cause  
resides in very remote Vessels, in a great Degree out of the  
Sphere of the Operation of Medicines.

Hence also, according to the System *oiSydenham,* if the di-  
gestive Organs are strengthen’d by warm Aromatics, the Force  
of the Circulation is increased, and the *gouty* Matter is impell’d  
with greater Force upon the Extremities, and consequently  
with a greater Degree of Pain. On the contrary, if the Disease  
is treated with cooling Remedies, the digestive Organs are re-  
lax’d, and a Foundation is lard for a greater Store of the *Ar-  
thritic* Matter.

Thet this short Theory os the *Gout* may not appear utterly  
barren, I must farther remark, that alcaline Salts are the only  
Substances known in Nature, -which afford a Menstruum ea-5  
pable of dissolving Earth.. Thus alcaline Salts of all Kinds  
dispose the Earth to a Solution sufficient for a subsequent  
Vegetation, and promote remarkably the Fertility of the  
Sori. . \*

It is therefore in alcaline Salts, that a Remedy for the *Gout*inust be fought for ; and if any one can render thofe suffici-  
ently penetrating, to reach into the remote *Secies* of Veffeis,  
where the material Caufe of the *Gout* resides, and to attenu-  
ate it in such a manner, as to make it capable of perspiring  
thio’ the Pores of the Part affecied, he will he able not only  
to cure a prefent Fit, but to weed it fo far out of the Consti-  
tution, as to render it very little, if at all, troublesome for the  
suture.

I must not omit taking Notice of a Topic sot the *Gout, of*which I had an Account from a Gentleman of Honour and  
Fortune, which gave me much Pleasure, as he had us’d it him-  
self *for* many Years with great Success, and recommended it to  
many of his Friends, who had found much Relief from the  
U5e of is.

. The Receipt is thus :

Take an Earthen Pot, capable of. containing five Gallons; fill  
it full of Elder-flowers full ripe, and clean pick’d, which,  
as they putrify, will fink down ; continue silling it every  
Day as long as any Flowers are left upon the Trees ; then  
put in three Pints of common Vinegar, and half a Pound  
of Bay Salt, then stop it quite close, and fet it in the Suri  
for two Months, stirring it every Day with a Stick ; then  
stop it close, and set it in a Cellar. If it breeds Worms,  
stir it with a little Salt, and mix them together. Apply it  
every twelve Honrs to the Part affii&ed with the Gout.  
It must be laid on cold. If too dry, put some Vinegar to  
it. It must be laid upon the Parr of the Feet affected,  
just when the Violence of the Fit is over, hast an Inch  
thick.

It is remarkable, that this Cataplafin makes the Part perspire  
excessively, insomuch that almost every Pore discharges a lain-  
pid Liquor.

If apply’d in the Manner, and at the Time above diredled,  
thet is, when the Excess of Pain begins to abate, it removes all  
that Pain and Lameness, which otherwise affiiol the Patient for  
many Weeks, and sometimes Months, as the Gentleman who  
communicated this assures me from his own Experience.

If we examine into the Nature of this Composition, we shall  
sind it very likely to perform all thet is attributed to it.

The ingredients are *Vinegar, Salt,* and *Elderesiawers.l' ~r*. The Nature and Properties of Vinegar are sufficiently ex-  
plained under the Artiole *Aceiurn.* As to *Salt,* I must refer my  
Reader to the Article SAL, after having taken Notice, that it  
contains an extremely penetrating acid Spirit, and an alcaline  
Earth. - -

It is not material to out present Purpofe, what Properties  
Elder-flowers are endowed with, or what medicinal Virtues  
they poflefs, when in a natural State j. because there Flowers,  
when put into the Pot, putrefy, fink down, turn to a fort of  
foetid Pulp, lose all the native Virtues of the Plant, and acquire  
new ones very different from the former. Thus it has been  
shewn under the Artiole ALcALi, thet putrefy Vegetables  
yield by Distillation a volatile, urinous Spirit, and Salt not to  
be distinguished from Spirit of Hartshorn, or any other animal  
Spirit or Salt; whereas before Putrefaction no such Spirit could  
by any Art whatever he procured from them.

By the Mixture therefore *of* Elder-flowers putrefy’d into an  
oily Pulp, and abounding with a volatlle alcaline Salt, together  
with Vinegar and Salt, both which are impregnated with a most  
penetrating Acid, a third Substance is formed very different from  
the several Ingredients which enter the Composition; for the  
Acid os the Vinegar acts upon the alcaline Salts of the putrisy’d  
Vegetable; and thefe again upon the Acid, so as to destroy

each other, and by their Union to form a *neutral* Body, some-  
whet like the. *Tartarus Regeneratus,* otherwise called *Terra  
Fcsmta Tartars.* But as the Salt used in preparing rhe *Tartarus  
Pegeneratus* is fixed, and that of the purrefy’d Elder-flowers is  
volatile, the Mixture resulting from the Union of the latter,  
with Vinegar, must of the two be the most penetrating.

' It is now well known, that neutral Substances are extremely  
saponaceous, and resolvent; and that they will act as a Men-  
struum upon Substances, especially those which are earthy,  
which neither Alcalis nor Acids will touch. It is probably such  
a Menstruum as this, which originally dissolves the Earth in the  
Soll, and prepares it for the Purposes of Vegetation. - And we 1heve some Reason to believe, thet the neutral Composition,  
which is our present Subjeci, penetrates rd.the obstructing Mat-  
ter which forms the Paroxysm of the *Gout,* resolves it, and ren-  
ders it capable of perspiring through the Pores of the Skin. And  
**I** make no doubt, but that whenever a Method can be disco-  
vered of conveying alcaline Salts to the remotest Series of Ves-  
sels, cloath’d or neutraliz’d in such a manner, that their caustic

’ Quality shall do no Injury to- the fine Vessels, the *Gout* will be  
as easily and effectually cured,, as any other Distemper.-  
- ARTHRODIA, αρδρωδία, from ἀρθρίω, to articulate. A  
Species of Articuiauon. See ARTICULATIO. ‘

ARTHRON, ἀρθρον, a Joint.

ARTHROSIS, ἀρθρωοϊς, from ἀρθροω, to articulate. The  
same as ARTIcutATio, which see. .

ARTIA, ἀρτία, ἀρτίη, according to some, is taken in the  
same general Sense as ἀρτηεία ; others, as *Erotian* observes,  
limit it to the Afpera Artery. . .

' ARTICOCA, ARTICOCALUS, Artichoke. The same  
as CiNARA, which fee. - \* '

ARTICULARIS MORBUS. The same as **ARTHRITIS,**which see. . . I 6

. ARTICULATIO, ἀρίρωοτς, Articulation.

.. The Banes cannot serve, the Purposes they are design’d for,  
except the several Pieces are fitly adjusted, and then kept to-  
gether in different. Ways. The most antient Osteologists  
(speaking only of rhe perfeist Bones of an Adult) call’d the  
first of there *Articulation,* and the other *Symphyses.*

*Articulation,* thus understood, is of two Kinds, one move-  
able, by which the Bones are allow’d a certain Degree of Mo-  
tion ; the other immoveable,, by which they are fixed together  
without Motion. The first is commonly call’d *Diarthroses*that is, (accordingto the Expression of *Carolus Stephanas,* an  
antient Physician of the Faculty *os Paris)* an *Articulation*separated; the other *Synarthroses, or. Rss. Articulation* con-’  
joined, s . ...

.' In the *Diarthroses,*. or moveable *Articulation,* the Pieces are’  
really separate ; and the.Parts in which theytouch, are each of  
thern-Covefdhy.a smooth Carthage, he means of which they  
easily slide upon one another. In the *Synarthroses,* crimmove-.  
'able *Articulation,* the Pieces are joined together in such a man-  
.'-..iter, as thet the Parts in which they touch have something par-  
' .tioular on their Surface, and cannot slide upon each, other.

There is still another Species *of Articulation,* which cannot;  
well be reduced to either .of the two former, -because it partakes  
ofboth ; Sind therefore I think sit necessary, to establish a third  
Kind, by the Name of *Amphiarthroses,* which agrees better to  
thisiSort, than to the other *Articulations,* to which it has some-  
times been apply’d. ἱ

- τ - ' HIA R'm RoSSs.

*Diarthroses* is either manifest with large Motion, or obscure  
wimisinall Motion. . .Each of these again, is of twh Kinds, one  
*indeterminate, os* with Motion- many different Ways, as that  
of the Os Humeri upon the Scapula, or of the Os Femoris on  
the Os innominatum ;. the .other alternative, or with Motion  
confin’d to two opposite Sides, as that of the Ulna on the Os  
Humeri, and of the two last Phalanges of the Fingers on the  
.first 2nd second. . .

Α Bone is .said to be moveable many different Ways, when  
it can he tumid upwards and downwards, forwards and back-  
wards, to theEight and to the Left, and quite round.

The Motion quite round is made either on a Pivot, that is,  
about-an Axis,, or in the manner of a Sling, where the Bone  
describes a fort of Cone,, or the Figure of *a* Funnel, one End  
of it moving inS very fmall Space, the other in a large Circle.  
. The first of. these round Motions is termed *Rotation,* by Ana-  
tomists ; the other is only a . Combination of several Motions  
upwards, downwards,. *etc.* and it must be remarked, that Ro-  
tation is not to be met with in all the *Articulations* for Motion  
many different ways ; for Example, the *Articulation A* the first  
Phalanges, os .the Fingers;with the Metacarpal Bones does not  
admit of it. /

Moreover this *indeterminate Diarthroses* is of two Kinds;  
one *orbicular* or *globular,* the other *stat* or *planiserm. .*

*: The orbicular Diarthroses* is -when the round End of one Bone  
moves in the Cavity of another, more or less proportionable to  
it, as the Head of the Os Femoris in the Acetabulum of the Os  
Innominatum : or when rhe Cavity in one Bone moves unon

an Eminence in another, as the Bases of the first Phalanges on  
the Heads *of* the metacarpal Bones.

The planiform *Diarthroses* is when the *articulated* Bones flip  
upon one another, much in the same manner as when we rub  
the Palm of one Hand against the other: This *Articulation* is  
sound in the Bones of the Carpus and Tarsus, and in the  
oblique Processes of the Vertebrae.

’ The Antients call’d the first of these two Kinds of *Articu-.  
lai ion, Enaxthresis* the other *Arthrodia.* Some modern  
*French* Writers seem to comprehend both under the Word  
*Genau,* a Term borrowed from Workmen, who probably first  
ignorant!}, took it from the human Body, to. apply ir to their  
Instruments. I own, that this Term, as ufed and explained  
by them, agrees well enough to all the Degrees of the *orbicular  
Diarthroses* ; but there am undoubtedly many *Articulations* of  
the other Kind fo very flat;- that a sidssul Workman would not  
allow them the Name *of Genou.*

. The *alternative-* or *reciprocal Diarthroses* bears fome Resem -  
blance to a Hinge; and for that Reason the antient *Greeks*termed it *Ginglymus,* which signifies the same thing; and has  
accordingly been transtated in some modern Languages., It is  
called by Mechanics *Charnall.*

It has been divided into several Kinds; but, properly fpeak-  
ing, ϊ think there can be but two. The first is that which is  
confined to *Flexion* and *Exteaston* ; and as in one of these Mo-  
tions the two Bones always make an Angle, I term it an *angul.  
lar Ginglymus.* This is exactiy the fame with the Motion of  
a Hinge. 1 he second Kind is adapted only to small Turns to-  
ward each Side, or to small lateral Rotations, in the Language  
of Anatomists ,: and therefore I term it a *lateral Ginglymus.*in each Kind several Differences are to be taken notice of.

o In die *angular Ginglymus* either each Bone partly receives,  
and partly is received by the orber, there being reciprocal Emi-  
nences and Cavities in each, as in the *Articulation* of the Os  
Humeri with the Ulna , or there arc only several Eminences  
in one Bone, received into the same Number of Cavities in the  
other, as in the *Articulation* of the Os Femoris with the  
Tibia.

- The *lateral Ginglymus* is either single, as in the *Articulation*of rhe first Vertebra of rhe Neck, with the Apophysis Denti-  
formis of the second , or double,- that is, in two different Parts  
of the Bone, as in the *Articulation* of the Ulna with the  
Radius. ' ~ : . . . ..

It must in general be observed, concerning these kinds of  
*Articulations,* that some of them are more perfect and close  
than others ; and thet they are not all confined to Flexion and  
Extension, or to the reciprocal Turns already explained, as we  
shall afterward see. r

. The *obseure Diarthrose,* or that which admits only of small  
Motions, is also of different Kinds, s’ ’Examples thereof are  
found in the *Articulations* of the Bones os the Carpus and Me-  
tacarpus, and of the Fibula with the Tibia. -

This *Articulation* was formerly called doubtful and neutral,  
and by some *Amphiarthroses,* while others reduced it to *Synar-  
throses.* The firit of there Names might pais; the rest are mi.:  
proper. . -

**SYNARTHRosIs.**

*’ Synarthroses,* or the *Articulation* of Bones fo join’d together  
as to remain fixed in their Situation, rs of two Kinds; one is  
made by Ingrailing; and the other in the fame manner as a  
Nail or Pin is fixed in Wood. The first may again be subdi-  
vided into a deep and more superficial Kind. The deep Kind  
is observable in the *Articulations* of the broad Bones. .The An-  
Dents term’d it Suture, because of some Refemblance it bears to  
a coarse Seam, as isseen in the upper Bones of the Scull. -It is  
made by Jags,-Notches, and Holes in. each of the *articulated*Banes, by which they are mutually indented, much after the  
fame manner as what is called Dovetailing by the Joiners. By  
the Antients it was called Unguis, probably because the indented  
Pieces are rounded like Nails. - .

The other Kind is that which is observed in Bones joined tor  
gether by more extended Surfaces, in which no Indentation ap-  
pears outwardly. \ This the Antients termed *Harmonia,* and  
the *Articulations* of some of the Bones of the upper Jaw were  
- given as Examples of it; Bur though they describe it as run-  
ning in a single Line, they did not mean this in a stria Sen.re,  
but only that the Joint was like that of two rough Boards with-  
out Grooves. They have exprefly told us, thet fome small In-  
equalities might be observed in these Joints . and son,, of them  
have used the Terms of *Suture* and *Harmonia* indifferently.

*Suture* differs very much from *Harmonia.* In rhe first; the  
Jaggings and Notches are .very considerable, and the Indenta-  
tion is made likewise by sindl lateral Eminences therein ; so  
that the Bones thus join’d cannot he separated without breaking  
a meat many of these Jags, and their, little Eminences ; where-  
as those that are joined by *Harrnonea,* may easily be parted  
without breaking any thing, or at most but very little.

*Harmonta* differs from *Suture,* in thet the Inequalities therein  
arc very fmall, .their Union is superficial, and there is no Ap-

pearance of them on the Surface of the Bones ; the Joint there  
representing only a kind of Line, more or less irregular.

The other Kind of ***Synarthrosis,*** an Example of which we  
have in the ***Articulation*** of the Teeth, is called ***Gomphosis,*** a  
***Greek*** Term still retained.

**AMPHIARTHROSIS.**

The third general Kind of ***Articulation*** partakes of both the  
***former*** two, the moveable and immoveable ; and for that Rea-  
son I have termed it ***Amphiarthrosis,*** or the mixt ***Articulation ;***aS resembling ***Diarthrosis*** in heing moveable, and ***Synarthrosis***in its ***Connexion.***

The Pieces which compose It have not a particular Cartilage  
belonging to each os them, aS in the ***Diarthrosis*** ; but they are  
both united to a common Cartilage, which being more or less  
pliable, allows them certain Degrees of Flexibility, though they  
cannot flide upon each other, such is the Connexion of the first  
Rib with the Sternum, and of the Bodies of the Vertebra with  
each other.

**SYMPHYSIS.**

Having examined the ***Articulation*** of Bones, weeome now to  
Consider their Union or Connexion, properly so called, which  
the Antients named ***Symphysis,*** taking this Term in an improper  
or large Sense, when they apply'd' it to the Connexion of  
Bones ; but in its proper Meaning they used it only to signify  
Ossification.

. The Authors who fay, that the Antients took ***Symphysis*** for a  
Species ***of Articulation,*** misunderstand them; neither are they  
more in the right, who advance that the Antients looked upon  
***Articulation*** and ***Symphysis*** as opposite to each other. If they  
speak of the most early Antiquity, both these Propositions are

in the first Place, the Antients do not confound ***Articulation***with ***Symphysis,*** but plainly distinguish them, taking ***Articula-  
tion*** for the simple setting os Bones together, independently os  
their being connected, or kept together. In the second Place,  
they do not look upon these two as Opposites, that is, where  
they talk os ***Articulation,*** they do not exclude ***Sympihjsis*** ; be-  
cause their Writings clearly shew, that in order to compose the  
Sceleton, they thought it necessary to bring them both in to-  
gether.

The Words of ***Galen*** alone are sufficient to prove this. In  
general he tells us, " That the Sceleton is a regular Disposition  
" os all the Bones connected together: ” And afterwards,  
" That their Composition is by ***Articulation*** and ***Symphysis.,***" that ***Articulation*** consists in the Bones heing naturally rank'd,  
***" Symphysis*** in their heing naturally connected." in fine, after  
having enumerated all the Differences of ***Articulation,*** he de-  
clares in plain Terms, that by ***Symphysis,*** or the Union of Bones,  
he understands not only that, by which two or more Pieces be-  
come one by Age, but also that, by which the Bones are natu-  
rally united and connected together in different ways. Of these  
he reckons three, (aS his Predecessors had done) by Cartilage,-  
Ligament, and Flesh. The first Kind os ***Symphysis*** they called  
***Synchondrosis ;*** the second, ***Synneurosis;*** and the third, ***Syjsiar-  
costs.*** He likewise takes Notice, that his Predecessors did pot  
take the Word ***Synneurosis*** so sar in a literal Sense, aS if it signi-  
fy'd the Union os Bones, hy means of Nerves ; but that they  
were accustomed to call both Ligaments and Tendons by the  
Name of Nerves, though they were Very well apprised of the  
ihssinction of these three things.

The Distinction of Symphysis into that without a Medium,  
and that with a Medium, can have no Place here ; for the first,  
os which the lower ***Jaw*** is cited as an Example, belongs not to  
the Connexion of Bones, but to their Formation while imper-  
fect ; and therefore may be called ***Sytnphysis*** of Ossification;  
and the other ***Symphysis os Articulation.***

In another Sense, however, this Division may still be made  
use of in this manner -. All the Pieces which compose the bony  
Fabric are naturally Connected and united together. This  
Union or Connexion, which, with the Antients, I term ***Sym-  
physis,*** is either without or with a Medium.

***Symphysis,*** without a Medium, is where the ***articulated*** Bones  
support themselves in their Situation, without any other Assist-  
ance than that of their Conformation only ; thus the parietal  
Pones are mutually fixed by their Indentations, and so give us  
at once an Example os ***Articulation*** and ***Symphysis.*** In the same  
manner the Bones in the Basis of the Scull are supported by  
those which make the convex Part of it. . In a natural State  
however, none os thefe Pieces touch one another immediately,  
but are separated by Membranes which run in between them.

The Connexion or ***Symphysis*** of Bones, with a Medium, is os  
three Kinds, cartilaginous, ligamentary, and fleshy or muscu-  
lar, that is, as the Antients termed them, by ***Synchondrosis,  
Synneurosis,*** and ***Syssearcosts.***

***Synchondrosis,*** or the cartilaginous ***Symphysis,*** is either move-  
able, as in that by which the Bedies os rhe Vertebrae are kept  
together, on which joins the first Rib to the Sternum ; or im-  
moveable, as that os the Ofla Pubis, in an ordinary State. The

Symphysis of Ossification is different from this, and the Union  
os Epiphyfes helongs to that, rather than to the ***Symphysis*** of  
***Articulation.***

***Synneurosis,*** or the ligamentary ***Symphysis,*** is sound in all **the**Joints designed for Motion. .....

***Syssearcosis,*** or the muscular ***Symphysis,*** is as real as the two.  
- former, and may he said to be much more general, because it  
accompanies and strengthens the others, and supplies what is  
wanting in them. The Connexion of the OS Humeri with  
the Scapula is a sufficient Proof os this ; for the Strength and  
Security of that Joint is owing more to the Muscles, than to the  
Ligaments. ***Winsiovests Anatomy.***

ARTICULI ***Plantarum*** are those Parts of Plants which  
swell into Nodes, or Joints, winch usually send forth Branches;  
***Blancard.***

ARTICULUS, ἄρθρον. - A Joint, or Connexion of Bones  
adapted for the Performance os Motion. ***Blancard.***

ARTIFEX, δημιουργὸς, ***Hippoc.*** τεχνίτης, ***Galen.*** An  
Artist. What the Word signifies in general, is well known ;  
but it is often appropriated to the Physician, who exercises the  
Art of Medicine from rational Principles iconfirmed by Expe..  
rience. Sometimes the Chymists and Spagirists take the Li-  
berty to apply the.Terms to one another. ***Castellus.***

ARTIFICIALE. Whatever is made or prepared either of  
the native Stone of Cinnabar itself, or from the Vein of Cinna-  
bar. ***Rulandus. / .***

ARTIOS, ἄρτιος. Sound, whole, perfect, complete in all  
its Parts, unhurt, ***r Hisp eh.*** Ἀρτίως, the Adverb, signifies \*

wholly, perfectly, ἀρμβδίως, that is, coherently, and fitly, as  
***His.ychius*** expounds the Word. ***\*Assioi*** also signifies the same  
as ἀπαρτίως, ἀπηρτισμένως, and ἀκριβῶς. Adverbs importing  
Exactness, Adequateness, Exquisiteness, in which Sense it is  
used by ***Hippocrates*** in his Aphorisms, and ***Lip. de Humoribus.***

Ἄρτιοι ὁι σπονδυλοι εντὸς ἀλλήλοις, " the Vertebrae are with-  
in-side even with each other." ***Lib. de Art. et Mochi.***

***"'Asaae biferas,*** with respect to Crises, are even Days, to  
which ***Hippocrates*** opposes περιαναζ odd, aS ἀριθμὸς καὶ  
περιονος is an evan and an odd Number. So ***Lib.*** I. ***Epid.***τἀ δὲ παροξυνόμενα ἐν ἀρτίησι, κρίνεται ἐν ἀρτίησι\* ***ων*** δ’ ***oe  
oraApsuoscast*** εν περιατῇσι, ***Rfoesjcu*** ἐν περιωῇσι\* " ***If the*** Paro-  
" xysmS happen on even Days, the Crisis will be on an even  
" Day ; but ***is they molest the Patient on*** odd Days, the Crisis  
" will in like manner fall out on an odd Day." Again, ***Lib.  
eodem, Irs » orgasm nkiaisaS. rZv osipriscav*** ἐν ταῖς ***dssiquie  
ngt/quiav so. so*** Of those periodical Fevers which come to a  
" Crisis on an eVenDay, the first critical Day is the fourth.''

ARTIPHYES, ἀρτιφυἐς, from ***asset, just*** now, and φήω, **to**produce, signifies new-born; but ARTIPHYES, ἀρτιφυὲς, from  
ἄρτιος, whole, and ***quia,*** is complete. Thus ***in. Hippocrates,***περ? επταμένου’ αρτιφυὴς ἀριθμὸς καὶ τέλει.ος is a complete and  
perfect Numher. . .

ARTISCUS, ἀρτισκος, from δ᾽τος, ***Bread,*** a Loaf, from  
its being in the Figure of a littie Loaf, signifies in general a  
Troche of.any Kind; but specially, and κατ'ἐξοχὸν, ***Artisci***are Troches prepared of Viners Flesh. ***Castellus.***

ARTISTOMA, ἀρτίστομα, in ***Hippocrates,*** περί τῶν ἐν κεφαλῇ  
τραυμάτων, is expounded by ***Galen*** in his ***Exegesis, osatiaAsmr  
lenctKei,*** " plain and smooth om all Sides." **ARTISTOMOS,**ἀρτάστομος, in another Sense, is one who pronounces the Worth  
**of**any Language perfectly and entirely without Mutilation..

ARTIYPOCHROS COLOR, αῤτιήπωχρος χροίη, in ***Hip-  
pocrates, orzor rav*** εντὸς παθῶν, is a palish and yellowish Colour,  
winch attends a Disorder of the Spleen. - - ’ ’ \*

ARTIZOA, ἀρτιζωα, from ***ζάκ.*** Life, signifies short-liv'd,  
and is expounded by ***Galen*** and ***Hisp chins bndyoy quit a, Ci*** endur-  
" ing but a littie Time.” ***Hippocr, arsot twats st&e, rprira.*** τἀ  
παιδία ἀρτίζωα, " these Children .are but short-liV'd.''. '

ARTOCREAS, ἀρτοκρεας, from Bread, and κρέας»

Flesh. The same as PAST AET U.M.. A fort of Pasty. .

ARTOMeLI, ἀρτομελι, from ἄρτος, Bread, and μέλίιτ  
Honey. A Cataplasm made of Bread :and Honey. ***Blancard.***. ARTOPTA, ***df/lumso,*** a Vessel to bake a Pye or Pudding  
in, metaphorically apply'd to such Women as have easy Labour.  
***Castellus. ...***

ARTOPTICIUS PANIS, from Bread, and ὸπτςάω,  
to toast. Toasted Bread. ***Blancard.***

ARTOS, ἄρτος, Bread. Ἄρτος, in ***Hippocrates,*** περὶ  
γυναικείης φύσ. is a Mass of farinaceous and other Substances  
inclosed in a Linen Cloth, and apply'd warm as a Fomentation  
to the Uterus. Os ἄρτος, as it signifies Bread, there are many  
Sorts to be found in ***Hippocrates,*** aS

. Ἄρτος ἄζυμος, from α Negative, and ζύμη, Ferment, or  
Leaven; unleavened Bread ; this nourishes most, and affords  
the least Excrement. ***Lib.*** 2.

- Ἄρτος ἀὓτοπυριτης ἤ ἀυτοπυρος, from ἀύτὁς,. mere, very, and  
πυρὸς. Wheat. Bread made of Meal, where the Bran is not  
separated from the Flours but the whole Corn goes into the  
Loaf. This is drying, and easily passes off. ***Lib.*** περι τῶν  
ἐντὸς παθῶν. .

.. Ἀῥτος διπυρίτης is δίπυρος, from δίς, twice, and πῦρ, the  
Fine. Bread twice baked, or that has twice proved the Fire.  
It is prescribed in the Dropsy. Ἄρτῳ μέν χρεἐιθω πυρίνῳ ἐπτῳ,  
ἤ τῶν σκληρῶν διπυρίτου' Let him use wheaten Bread toasted,  
" or hard Bread twice baked.” ***Lib. pradict.*** This is also  
called δτεφθος, and dries powerfully.-

Ἄρτος ἐγκρυφίης,. from κρήπτω, to hide. Bread baked under  
the Embers, called by the ***Ramans Panis Subcincritius.*** This,  
according to ***Galen,*** was the worst of all Bread, heing the driest,  
and least nourishing. ***Lib.*** 2; περ? διαίτης, and ***Lib. Q..*** περι  
γυναικ.

Ἄρτος ἔξοπτος, from ὸπτἀω. to toast. Toasted Bread, which  
is very drying, and prescrib'd by ***Hippocrates*** in a Dysentery,  
***Lib. I, Epid,*** and ***Lib. orcci rails*** ἐντος παθῶν, where, in one  
Place, it is call'd ***scscA*** ἔξσπτοςἔωλος, (i stale toasted Bread ;'\*  
and ***Lib. relume cigrso. idle.*** ἄρτος ἔξοπτος ἤ ἔνωμος, " toasted or  
" crude Bread," are opposed one to another.

Ἄρτος ἐσχαρίτης, from ἐσχάρα, a Crust ; Bread broil'd on the  
**Hearth,** or a Gridiron ; whence some call it ***Panis focalis, foca-  
rius,*** or ***craiicularti,*** from ***Focus,*** a Hearth or Fine-place, and  
***Craticula,*** a Gridiron. This is a very bad sort of Bread, in  
***Galen's*** Opininn, hecause the Outside is burnt to a Crust, while  
the Inside remains crude. It easily passes off, but hurts the  
Stomach. According to ***Hippocrates, Lib.*** 2. περὶ διαίτίΐς, such  
Bread (ὸι ἐσχαρίται ***dfri)*** is less nutritive than whet is baked in  
an Oven, but more drying, hecause more scorch’d by the  
Fire.

Ἄρτος ζυμίτης, from sdurn. Leaven. Leaven'd Bread, what is  
a littie fermented. This Sort is light, has an easy Passage, nou-  
rishes littie, and is easily digested. ***Hippocr. Lib.*** 2. περὶ  
διαίτης. .

. Ἄρτος ἰπνίτης, from ἰπνὸς, an Oven. Bread baked in an  
Oven. This is very nourishing, because Very little burnt.  
***Hippoc. Lib. pradict.***

. Ἄρτος καθαρὸν, pure Bread; that is. Bread made of fine  
Flour. This is opposed to συγκομιστὸς ***(see below)*** and άυτοπυρας  
***(see before]*** in several Treatises of ***Hippocrates.*** Opposite to  
this may also be reckon'd, ***ἄρτος far apri,*** and ἀχυρῶδος, from  
ῥύπος. Filth, and ἄχυρον. Chaff; impure Bread, and chaffy  
Bread; and also whet is call'd)πιτυρώδης, and πιτυρίτης, from,  
πίτυραν, Bran, branny Bread; for, says ***Galen, Lib. 2. de Cur.  
ad Glauc.*** as in fine or pure Bread we have the Meal, . not as  
Nature made it, but cleansed from the Bran ; so in the coarse  
branny Sort the finest Flour is taken out.

Ἄρτος ***Khalsustrns,*** (from κλίβανος, a little moveable Oven,’  
made of Earth, Iron, Copper, or any other convenient Matter)  
Bread baked in a portable Oven, by some call’d ***Panes Tostua-.  
'ecus, stcxD T.ostus,*** the Vessel in which it was baked. This sort;  
of Bread; according to ***Hippocrates, Lib.*** 2. et 3. περὶ διαίτης,  
is very dry, but not very nourishing. In ***Galens*** Opinion, ***Lib.***I. ***de Alim. ¥ a cult,*** it is the best, with’"respect to its way of Pre-  
paration and Dressing ; and ***Diphilussm Athenaeus, Lib.*** 3. extois  
it as having all good Qualities, -and being preferable to all other  
Kinds; for it is grateful to the Stomach, generates good Juice,  
is easily digested, readily distributed, and neither binds the Bel-  
Iy, nor distends it with Inflations.

Ἄρτος ὸβελιαιος, or ὸβελίας, from ὸβελός, a Spit. Bread spitted  
and roasted. It is moderately, nutritive, drying, and is not much  
burnt, ***Hippocr. Lib. 1. xcci HitsmK***; where it is also call'd  
ββελιέος.- ***In Athenaeus, Lib. ^r lt*** is said to be call’d όβελῥας  
***apjsm. nrat art oscocas 'xvjress.aRsspu, dur its*** τῇἈλεξανδρίῳ, ἤ ***art in  
o'AnrioRots bdjdurcu' iC*** Either hecaufe .it was sold Tor an Obolus,.  
***" as in Alexandria,*** Or because it was roasted on Spits.''  
. Ἄρτος dur πυρῶν, Bread of Wheat. It is very nourishing,  
and yields but little Excrement. ***Lib. .2. oroci suedruSy et Lib.,  
matil deXkias afleeznt\* ... . .***

Ἄρτος ὓκ πυρῶν ἀπτἰστων ἤ επτράμένων, (from πτίφα, to pull off  
the Rind or Bark, or cleanse from Hulks) Bread made os Wheat  
hush'd, orunhush'd, that is, cleansed or uncleansed,. ***Lib. arcci***ἀρχαἐνις ἰητρικῆς. Bread ἐκ τυρῶν ἀπτίστων seems so he the same  
as the πίτυράι/Ιηῆς " branny," -winch has not been cleansed from  
the Bran. Therein alsoπήρινος-αρτος όπτός, ἢ τῶν.σκληρῶνπυρῶν\*  
" Wheaten Bread, toasted. Or made os harden'd Wheat,"  
which was prescrib'd in Dropsies, ***Lib. oscci*** τῶν ἐντὸς παθῶν. ‘

Ἄρτος πυρῶν.ρετανίων μάχυλῶ ^Γ.πιτὑρων ἐζυμωμένος. Bread  
of ***Siianian*** Wheat, (a sort of Wheat that comes to Persectiory  
in three Months) :sennented with the Juice of. Bran, ***Lip.*** 3.  
περὶ ιΛιαίτης. This easily passes thro' the Body.. --

Ἄῥῖος σεμιδαλίτης, from σ-μάδαλις, fine Flour. Bread made  
os fine Flour. This was powerfully nutritive, tho' less than  
what was made os Alica or Siligo, and but lrttle of it pass'd  
Thro' the Body, ***Nib.su.*** περὶδιαέτης. ***Galen,*** as well.***Acs Celsius***and ***Paulus,*** tails us, that this kind of Bread affords most  
.Nourishment, next to whet is made of Siligo ***(see below foe*** and  
***Philistion, in Athenaus,*** will havc it more strengthening than  
Bread made-of Alica.

Ἄρτος.συγκομιστὸς, from συγκομίζω, tn collect or bring toge-  
- liter. Bread, made of all the Parts of the Corn taken together.  
This is drying, and easy of Passage, ***Lib. y. et*** 3. περὶ διιάτης.  
This is opposed, to καθαρας, ".pure," ***Lib. do Pat. Vict. in***

***Morb. acut.*** and ***Lib. crguli df'/sudjf. Galen, in Su&.EXegeftii***expounds συγκομιστοι ἀρτοι, by ῥυπαραι διὰ τὸ πάντα ἄμα τἀ  
αλευρα συγκομιζες&αι, καὶ μὴ διακρίνεθασ " Coarse, hecause all  
" Parts of the Meal were thrown together without Distin-.  
" ction.'' \*

Ἄρτος din χόνδρώ ἤ χονδρίτης, from χονδρος. Alica, Bread  
made of ***Aliea.*** It is extremely nourishing, and but littie of it  
passes off as excrementitious. ***Lib.*** 2. πἐρί διαίτης.

Ἄρτος ἐωλος, stale Bread; It is drying, not very nutritive,  
and attracts Phlegm, ***Lib. oriel rare iorrbs crurijisu.*** It is rail'd by  
***Celsus, Lib.*** i. ***Cap.*** 3. ***Panis Hesternus. . . .***

sincere are other Distinctions of Bread in ***Hippocrates, as***τῳ χυλώ πεφυρημένος. Bread kneaded and macerated in the juice  
of Wheat: This is very nutritive, light, and easy of Passage,  
***Lib.*** 2. ***rased JialTes.*** Ἄρτος πολλώ ὓδατι ἤ durdur-

τος. Bread work'd up with a great deal of Water, or not work'd  
at all. ***Lib. rrcci cioAn*** ἰήτρ. Ἄρτων όι μέγιστοι. Bread in large  
Loaves : Such Bread is more nourishing than what is in smaller  
Loaves, hecause less burnt and dry’ci. ***Lib.*** a. περὶ διαίτης.  
Ἄρτοι θερμοτε hot Bread, which dries the Body ; ἄρτοι ψυχροι,  
cold Bread, which is less drying than the former, but nourishes  
littie, and in some measure emaciates. ***Lib. 2. otzgii*** δ***sal***της.

Besides the foremention'd Sorts there was a more modern  
kind of Bread in Use among the ***Romans,*** which was made of  
***Siligo,*** the finest and purest Flour, of which ***Pliny*** says, ***Silis.  
ginern proprie dixerim Tritici Delicias; Candor est, et sim vir-  
tute, et sine Pondere : ct*** Siligo may properly be call’d the delici-  
" ous Part of the Wheat ; it is Whiteness, without Virtue or  
" Weight,” ***Lib.*** IS; ***Cap.*** 8. And ***Galen,*** speaking of the  
different sorts of Bread, has these Words: ‘Ο join κσίναρώτατος  
ἄρτος καλεἴται σιλιγνίτης, ὸ δ’ εφεξῆς σεμιδαλίτης, ἀλλ’ ή μἐύ  
σεμίδαλις 'Ελλογικόν τε καὶ παλαιὸν, .σίλιγνις 6 οῦχ Ἐλληνικὸν,  
ἐτέρως o ἀυτὴν όνομάζβν οὐκ ἔχω. The finest Bread is call'd  
***Ci Silignitfs*** ; the next in Fineness, ***Semidalites*** ; now ***Sertidalis***μ is an old Gr^Word, but ***Silignis*** is not ***Greek,*** and I have  
***i( no*** other Name sor it.'' Σιλιγνις is plainly coin'd from the  
***Latin Siligo.*** He goes on to compare the different kinds of  
Bread, with respect to Nutrition, aS follows: Τραφιμωτατος^  
o σιλιγιιτείς ἀυτῶν, ἐφεξῆς ὸ σεμιδα.’ἁτης, καὶ τρίτος ο μἐσος καὶ  
συγκομιστὸς, ο καὶ άήτοπυρίτης, ἐφ' ῳ τέταρτός ἐστι τὸ τῶν ῤυπαρῶστ  
ειδος, ***ων io^eseet*** ο πίτυρίας, ος Q καὶ ἀτραφώτατός ἐστι. iC The  
€ί most nutritive of these sorts of Bread is the ***Silignites*** ; the  
ee next, in that respect, is the ***Semidalites***; the third is a mid-  
ίς die Kind, call’d also ***Synccmistos*** and ***Autapyrites*** ; the fourth  
‘Vis a hind os black and coarse Bread, the worst Sort of which  
cc isthesifryrim, which also affords the least Nourishment."  
***Galen, de Alim. Fac. Lib.*** I. ***Cap.Q..***

ARTUS, τὰ κῶλα. The extreme and most compacted Parts  
of the Body, as the Hands and. Feet, ***Castellus.*** According  
to others, they are the Members which extend themselves from  
the Trunk, and are divided into- Joints. ***Castellus. ΒΙαη-  
eard. ... ... '***

ARTYMA, ἀρτυμμν from ἀρίήῳ, so season, or prepare.  
The same as CONDIMENTUM, which see. . 1 „ .  
- ARUBUS, Crude Butter, ***fohns.on.***

. ARVINA, λίποςν στέαρ. The same aS ADEPS, which see.

ARUM, Offic. Jr B. 2. 784. Chain 258. Rail Hist. 2;  
I208. Synop. 3.\_ 266. Dill. Cat. Giss. 56. ***Arum vulgare,***Cer. Emac. 834. Merc. Bot. 2I. Phyt.. Brit. II. ***Arum uulr  
gare maculatum, et .non maculatum,*** Parlt. Theat. 372. ***Arum  
giulgare maculatum etsine maculis.*** Met. Pin. II. ***Arurn macur  
latum maculis candidis suel nigris, et non maculatum,*** C. B. Pin.  
I95. Tourn. Inst. I5S. Elem. Bot. I30. Hist.. Oxon. 3. 542.i  
Rupp. Flor. Jen. 2O2. Boerh. Ind. A. 2. 74. Puxb. 26a  
CaUCKOW-PINT. ***Dale, fas,*** WAKE-ROBIN.

***^ sirum,*** among the ***Syrians,*** is call'd ***Lupha.*** It shoots forth  
Leaves like those of. the ***Dracunculus,*** but smaller, and not so  
spotted: The Stalk is a Span long, reddish, and shaped like a  
Pestle, on the Top of which grows a yellowish Fruit. The  
Root is white, much like that of the ***Dracunculus*** ; and, being  
‘ boil’d, Joses so much .of its Acrimony as to hecome eatable.

The Leaves are pickled sor Food, and, being lest to dry os them-  
selves, are boil’d and eaten.

: The Root,. Seed, and Leaves, have she same Virtues aS those  
Os the ***Dracunculus***besides which, .the’Root is apply'd as a  
Cataplasm, with Cow-dung, to the Parts affected with the  
Gout. It is preserved like the Root of the ***Dracisuculas,*** and  
is commonly so little acrimonious as to be eatable, ***foioscocides,  
scLiheL. Cssep.sefol. ...***

The Roots of ***lpiace-Ecciin*** are roundish and tuberous,  
about aS big as a Walnut, of a white Colour on the Inside,  
Tending from the Sides several white Strings, by which it is fix'd,  
in the Earth; The Leaves are long and large, ‘ os a shining-  
green Colour, in Shape like the Head of a Spear, or a barb'd  
Arrow; in some Plants they are fun Of black Spots. From  
. among the Leaves arises a round Stalk, having, at the upper  
Part, along Skin or Hulk, closed at Isoteomfeand opep at the  
.Top.; of st greenish Colour on the Outside, and purplish with-  
in ; in which is inclosed a long naked purplish cylindrical ***Pistil..***..Z&r^j-eheochpassX On the sower Part with, a .Circle of Chives

handing above the Rudiments of the Berries; which, after the  
*Pistillum* and its Covering are fallen off, grow to be large  
round Berries, of a yellow-red Colour, full of Pulp, each con-.'  
reining oneround Seed.- The whole Plant, Root, Leaves, and  
Seed, are very hot and biting, insiaminn the Mouth and Throat  
for a long time. It grows every-where in Hedges and dry  
Ditches, and flowers in *May,* and the Berries are ripe in  
Testes. ; . .

This Herb is call’d *Aron, Jarus, Pes Vituli, Barba Armis,  
Sacerdotis Virile, Serpentaria Minor, Dracontia Minor, Ade-  
mum.* The Root has a pungent Taste like Ginger, which burns  
the Tongue. But ’tis said, that in the Fields aheut *Cyrene*there is an *Arum* found which eats like aTurnep, and is entire-  
ly void of Acrimony. ' It is gatliePd in the Month of *March,*and, when dry, is principally used in the Shops of Apothecaries.  
It is of a hot and drying Nature, dissolves and liquifies the coa-  
gulated Humours of the Body, is an excellent Antifcorbutio,  
and opensand dissolves internal Obstructions, especially in Dropsi-  
cal Cases. It purifies and sweetens the Blood when impregnated  
with saline Panicles, opens the Breast, and facilitates Expecto-  
ration in Disorders of the Breast, and Coughs ; for Instance,  
y’Take of the best fresh Arum-root, half an Ounce; hell it  
in White Wine till it hecomes soft, and make it into a  
Linctis, with Syrup of.Hyssop. '

It relieves old Coughs, and is good for Consumptions, espe-  
cially when it is often moisten’d, and afterwards dry’d, with  
. Tinolure of the Flowers of Daisy and wild Poppy, *Jah. de  
Muralt. in Hipp. Hilvet. P.* 653. *Ephem. Fl. C. Dec. 2. Ann:  
5. Oof.* I 80. *Dieuches, .* according to *Pliny, L.* 24. Na Hi..  
*C.* I6. gave the Powder of it, mix’d with Meal, and baked in  
Bread, to those who were assiictsd with Coughs, heavy Sighs,  
or an *Orthopnoea,* or a Spitting *of* purulent Matter. It pro-  
motes Urine, and cleanses the Urinary Vessels, and the Matrix.’  
It promotes the Menses when obstructs!, warms the Stomach  
when cold, excites the Appetite, and strengthens the Digestion.  
*Hiartraan, iorPrax. Chym.Hielmont. Pharmac. at Dispense Modern.  
N.* 46. says, that it cutes Ruptures; as also long and tedious  
Fevers. *Vid. Dan. Milii Pharrn. Spagir. L.* 2. *C.* Io. *Pet.  
Eaureneerg. Appar. Plant. L. 2. C.* 6. and is very good in  
Hysteric and Epileptic Cases. *Gregor. Horstius,* with the Root  
of it alone, recover’d a *Hissean* Girl of five Years old, who  
had been entirely deprived of the Use of her Speech for almost  
a whole Year, Z. 3. *Obf. Med.* 24. The fame is related by  
*J. Hotnung,* in *Cifla. Mede Apist.* I32. The Root is also an'  
excellent Medicine against the Plague and Poisons, *Plin. l.  
Hi Trag. L. a. Hist. Piant. C. de Are. Jo. Bruyer. de re Ceb.-L.*8. *C. 6. Tarqu. Schnelleberg. Tr. de* 20 *Herbis Pestilentiae ve-  
nena adversantibus,* who styled this Plant the *Miracle of Nature,*on account of its remarkable Efficacy against the Plague, *M.  
Unzer. Accidat .Pestilent. L.* 2. The Root when fresh, if boil’d,:  
warms and corroborates the Stomach, strengthens the Appetite,  
purges the Breast, and is good for Rheumatic Disorders,-and the  
. Vertigo; as also for Stiffness of the Limbs,-Swellings,-and  
fetid Wounds. The Herb itself, bolld with Victuals, makes  
People lean. The Leaves, when fresh, as also the Powder os  
the Root, cure inveterate Ulcers, Fistulas, feud Cancers, and  
the Bites of venomous Animais, if they are apply’d to them;  
*Tragus* fays, that for pestilential Swellings he knew no Herb  
more efficacious, than the Leaves of *Arum,* apply’d green to  
them. *Gearg. a Turre* has observ’d, more than once, -from  
undeniable Experience, that Burns are heal’d -by its -Leaves  
when apply’d to them, and frequently renew’d; *DeHiest. Plants  
L.2..* C. 244. In order to cure Ulcers and Wounds, some  
People make an excellent Ointment of its Root, reduced to  
Powder, and boil’d with Butter made in the Month of -dduri  
*El. Aeynsn,* that *tender-hearted Samaritan,* commended: :the  
Root of *Arum,* mix’d with Flowers of Sulphur, as'one of-the  
most efficacious Remedies- in a Phthisis,- *jo. Dolaeus, Eneyclo~  
pad. Med. L.* 2. *Ci 4.* See also *El. Beynen, P. stA.* '23.  
The Juice, express’d from-the bruis’d Root, is good for a  
Polypus of the Nofe, if pur up the Nostrils on a little Cott,  
ton. The Foetuses of all Animais in Nature are cxpell’d  
by *Arum,* fays *Pliny.* Many reduce the Root to a Pow-  
der, and apply it to the Part affected by the Gout, *Crus.  
L.i. Const* 26. The Water distill’d from its green Leaves’in  
-Spring, is an admirable Remedy for the Scurvy, *Th. Wolli'soTh.  
de Scorbut. C.y.* It is also good for Maniacs, and such as-are  
melancholy. : Many distil, from the whole Substance of-this  
Herb, a Water, which they give to those who labour under Rup-  
tures. This Water is also good against the Plague, purifies old  
Wounds and Ulcers, takes Spots off the Face, whitens the  
Skin, and destroys the Wrinkles of the Face. Several People  
inspissate the Juice of the Root at the Sun, and, when they  
want to use ir, dissolve it in Rose-water, with which they wash  
their Fanes. Country Gris, when its Kernels are ripe,. use  
’ them for a Varnish,, to give a purple Colour to their Cheeks,  
' which they rub heartily with them, almost to the Lost os rhcEpidermis or Scarf-skin, *Georg, a Turre, B. c. .* The *Tragea*

*Stsmachialis* os *Birckmamus,* made of Arum-root,' describ’d by.  
*Querceum, Pharm. Rastit. L. i. C.* ao.. is known tn the Shops1of some foreign Apothecaries. This Medicine warms cold.  
Stomachs, promotes Digestion, procures an Appetite, prevents  
the Vertigo; removes Obstructions of the Liver,' Spleen, and  
Mesentery;. and is good for those who labour Under Hypechon-  
driac Disorders, Melancholy proceeding from Flatulencies, or  
the Scurvy. It is alfo serviceable in the Chlorosis in Giris,  
Cachekies, Swellings of the Belly, beginning Dropsies, Quar-  
tan, and other protracted and intermitting Fevers, and other  
Disorders caused by gross and corrupt Matter in the Stomachi  
It is also given for the Stone. In Apothecaries Shops there was.  
formerly prepar’d, from its Root, a particular farinaceous white-  
Substance or Powder, call’d by Chyrnists *Facula,* from theZninv  
Word *Faeces,* because thet Substance separatcs,of its own Ac-’  
cord, from the rest of the Liquor, and subsides to the Bottom  
of the Vessel. . It operates in the same manner with the Root,  
tho’ more mildly ; for which Reason ’tis successfully used,  
among the Pectoral Tinctures and Powders, employ’d to dissi-  
pate Phlegm, and glutinous Humours, and facilitate Expeciora-  
tion. It also removes inveterate Obstructions, and is an efiica.:  
cious Remedy in Quartan Fevers, Cachexies, and Scurvies, *Jc  
Coast, de Rebecqu. Acr. Modicia. Hilvet. P. M.* 242. *Jo. Otto.  
Hielbig.* in *Ephem. Na. C. Dec.* I. Ac. 9. *et sc,. -Obf.* 194.  
soys, that, among the *Indians,* the Root of *Arum,* boil’d, is

used instead of Bread. . . - - s

**PULvIs RADicUM** Ari **CoMPosITus:** *Compound Powder  
of Arum-root. - "*

Take of the. Root of spotted Arum, two Ounces ; -of the  
common Acorus-root, and Saxifrage Pimpine], each one  
- Ounce; of Crabs-eycs, half an Ounce; of Cinnamon;

.. three,Drams; of Salt of Wormwood, one Dram; anst  
- -let them he made into; a Powder. 2V. *A.* The Arum-,  
root is always to be fresh added to in.

This is but lately introduced into the Dispensatory; and  
here is left out the Salt of Juniper, which was order’d in the pre-  
ceding, because it is a thing not usually made, and anfwers- nor  
Intention, but what is provided sor by the Salt of Wormwood ;  
but this mikes it necessary to he kept close from the Air, be-  
cause it will else grow moist, and spoil the Medicine, tho’ the  
principal Necessity os so keeping it, is to preserve the Pungen-\*  
cy and Volatility of the Ingredients, which otherwise would  
soon exhaleAnd for the same Reason also, it is now directed-  
to mix *aha Arum* Root always fresh, as it is used ; because that-  
is the chief ingredient, and soonest spoil id by keeping. *Quin-.  
cses London Dispensatory. -*

*' Pay* enumerates the following Species in his Chapter .of  
*Arum: /; - - ’ , , -*

I. *Arum,* J. B. *Vulgare,* Ger. *Vulgare maculatum et non  
maculatum,-Fork. Arurn a. etsoy fove maculatum Maculis can-i  
didis vel nigris, et vulgare non maculatum,* C. B. - -

*is Arian- venis -albis,* C. B. *Magnum rotundiorefolia.* Parks  
*Majus Veronense,* Lob. \ - :-'

- 3d *Arum Byzantinum,* Clus. LB. C. B. Patio *Draccn-  
tiupe minus,* Gen .quoad Icon. .

*' 4.' Arnen 'montanum,;* Alpini Exot.\_ ' . - : '

"75.‘ *Arum maximum Asgypciacarn, quodvdilgo Colo casta,* C. B.  
*Ar. Acgypti rotunda et longa Radice, vulgo Colacasta dicta.* Park.  
Cniniascd,--Clus.-jo B. *Aegyptiacum,* Ger.

The Root of-this, as well as the whole Plant, is acrimonious  
like the commori *Arum,* but' 'in'a milder Degree, and is there-  
fore usedtnEood; and for other:Purposes. *InEgrpri Syria,'*and other *Eastecr.* Countries, it is eaten as commonly as Tur-  
neps'in *Germany* -’and is very much coveted *by* the *TurkAse* and  
*'dyrican* Slaves-at *Naples. Boniius* writes; thet it is of a venom-  
ous Nature,-iahd requires three Days Maceration in Water, to  
render it eatable —- ... . .

*.' &l Dracunculus aquaticus.* Ger. J, B. *Nester aquaticus.* Park.  
*Palastrisefivuriadipe arundinacea'Plinii, C.B. '*

*so.-Anapi'mcirntale,* Ardabar *dictum Zanim,* Hist. Bos.

Cani I2. τι-. *i.' ; - ---;* **- -.ptior**

8.' *Aritpe Indicuni,* Rumphal. *Dictum Zanoa,* Hist. But.  
Cac.91: ; potionui *tu-jc. sa.* .Her. .o

9. *Arisafum latifolium,* Farits Get. *Latifolium quibufdam,*J, B. *Latifolium alteram Css.* Β. - *Item latifolium majus ejufdem.*THE- BROAD-LEAVED FRIERS-COWL.

**r Io:** *Arisiirtemdngastisaliiars,* J. B. Geis *Longifolntm,* **Parke***Angustifolium Diascorutis forte,* C. Β.

' ARUNDO, the Redd. Of this *Dale* takes Notice of  
several Species; The first is the .....

*Arunda', Cefiic. Arundel vallatoria.* Ger. 32s Emac. 3sh  
Raii Hift; *-is ASaS.* Sytioni *gi-urit.* Mer. Pin. II. *Arunda  
vulgaris palustris, so.* Β. 2. 485. Hist. Oxon. 3υ nI8. *Arunda  
‘vulsaris vallatirias* Merc. Βοη I. 21. Pint. .Brit. II. *Arundo  
.vulgaris five phragmites Diofcoridis,* C. Β. Pin. I7. TsieaI.  
'269.. Tourn., Irrst.' 526. Elem: Eot. 4I8. Boerb- Ind. A. 2.  
*.suit.* Dill. Cat. Gin. 175. Rupp, Flor. Jen. I55. Buxb. 27.

*Harundo vulgaris five vallatoria.* Park. Theat. I208. *Arundo,  
Harundo, Calamus,* Chab. I 93. COMMON REED.  
*Dale.*

The Reed has thick, knotty, join'd Roots, which spread  
and increase much, running obliquely in the earth : The Stalks  
grow to he above the Height of a Man, hollow, and with seve-  
ral Joints; at each of which grow long narrow Grass-like  
Leaves, rough and hard; and on them Tops a large husky Spike  
or Panicle, os a brownish-red Colour, full of a soft, downy  
Substance, hanging down the Head, without any Visible Seed.  
The Stalks die away every Winter. The Reed grows by Ri-  
ver-sides, -and in Marshes.

**ARUNDO** DONAx, Offic. Park. Theat. I2O8. *Arundo  
Cypria,* Ger. 32. Emac. 36. *Arundo fativa,s.eu Donax Diof-  
coridis,* Raii Hist. 2. I275. C.B. Pm. \_I7. Tourn. Inst. 526.  
Flem. Bot. 4I9. Hist. Oxon. 3. 2I9. Boerh. Ind. A. 2. I62.  
C. B. Theat. 27 I. *Arundo maxima et hortensis, J.* B. 2. 485.  
Chab..Io2. THE GREAT REED, *scale.*

The Medicinal Virtues of these are said to be alike, which,  
according to *Bartholomaus Zorn,* are as follows:

- Its Root attracts any Matter lodg’d in Wounds, if it is re-  
duced to Powder, with Wine, and apply'd to the Wound; or  
if it is taken fresh, and reduced to Powder, with an Onion ;  
or if the Powder of it is mix'd with Honey, it produces the  
same Effect, *Oribas. de Morb. Cur.. L.* 3. Co 32. It also  
removes the Pains arifing from Dislocations of the Limbs, and  
Carries off Pains in the Hips. When bruised, and apply'd to  
any Part that aches, it is of wonderful Service, *Hicr. Mercurial,  
fried. Pract. L. 4. C.* 2. If it is boil’d in any Lixivium, and  
the Head frequently wash'd therewith, it causes the Halt to  
grow ; and cures scald Heads, *fulius Censor Claudinus, Ep.  
VincenaaTanar. siol.* 88. says, that the Root of the *Arundo* pro-  
duced the fame Effect in Rheumatisms and Catarrhs, with the  
*Peruvian* Bark. .It is also good for these who labour under  
Consumptions. *Aetius* says, it is of a drying and warming Na-  
sure, , and is therefore of Service to dropsical Patients, *Serrn.* Io.  
*c.* 32. See also*Nphern. N. C. Dor.* 3. An. -3. *Obs.* I59. It  
brings Apostems to Suppuration, *Lev. Lemn. de Herb. Biblies*4. 27. The green Leaves, cut and apply'd, carry off the .  
Wild-fire and *Erysipelas.* Poor People boil the Flowers in  
Water, or in Beer, which they mix with Honey, and drink,  
after having filtrated it, in order to cure Coughs, Oppressions of  
the Breast, and Consumptions. The Antients made Flutes,  
find other musical Instruments, of the *Arun do.*

**ARUNDO SCRIPTORIA,** Ossie. Ger. 34. Emac. 37. Jo IL  
R. 487. Raii Hist:. 2. 1276. Hist. Oxon. 3. 2I9. *Arundesori.,  
proria atro-rubens,* C. B. Pin. I7. Theat. 273. Tourn. Inst. .  
526. *Harunda minor sive Elegia,* Park. Theat. I2II.  
WRITING REED. *Dale.*

Ido not find any Medicinal Virtues attributed to it.

ARUNDO **TABAXIFERA,** Ossie. *Arundo Mambu,* Pison.  
Manti Atom. I86. Raii Hist. 2. I3I5. *Arundo Indica maxi-  
ma arborea cortice fpinofo Hermanni,* Syen. in not. Hort. Mal.  
C. Comm. Flo. Mal. 36. *Arundo arbor Tabaxifera,* Ὀ. B.  
Theat. 285. *Arundo arbor in qua humor lacteus gignitur, qui  
Nabaxir Avicermee et Arabibus dicitur,* C. B. Pin. IS. Hist.  
Oxon. 3. 2 I 9. *Arundo arborea Mambu vel Bambu dicta,* Pluk.  
Almag. 53. *Canna ingens Mambu vel Bambu dicta.* Park.  
Theat. I63O. *TobaxirfiveMambu arbor,* J. B. I. 222. *Mam-,  
.lau arbor, T.abaxir Garcia id Accost a,* Chab. 67. *Bambu et  
Eamba,* Nienhou. Leg. 9I. Ily, Hort. Mal. I. 25. Tab. I6,  
THE BAMBU CANE *Dales -*

fist sc writes,. that the young Bambou-canes are full of a  
sight, spongy, and liquid medullary Substance, (not so much  
stuffed as the common Sugar-canes) winch the common sort of  
People greedily suck, on account of its grateful Tafle. The  
young Shoots, winch are Very succulent and savoury, are much  
valued *India,* by Strangers as well aS the Natives, as bring  
the Base of that famous Composition call'd ACHAR, which is  
.imported into *Europe,* and accounted a Delicacy among those  
Jos nice Palates : And I myself, says he, have more than once  
tasted it with Pleasure.. But when these Canes are grown tall  
.and old, the contain'd Liquor is alter'd in Substance, Colour,  
.Savour, and Efficacy ; and by degrees is protruded forth, and  
(coagulated, near the Joint, by the Heat of the Sun, and har-  
.den’d like a white Pumice-stone: Soon after it loses its native  
-Sweetness, acquiring a peculiar Savour, much like that of burnt  
Ivory, with a littie Astringency, and is call'd by the Natives  
Sue **AR MAMBU** (theTabaxir of *Garcias* and*Acosta}',* which  
the lighter, whiter, and smoother it is, the greater is the Value  
set upon it; and the more uneven its Surface, and the more of  
an Ash-colour, the worse it is accounted.

The Tabaxir is very fit for Medicinal Purposes, eagerly sought  
. after by *scae Persians* and *Arabians,* and purchased at its Weight  
. in Gold or Silver. The *Indians* use it for Wounds of the  
*Testes* and *Penis.* It is also said to he efficacious in Choleric  
Affections, and the Dysentery. *Garcias* writes, that it is pro-  
per to he used in burning HeatS, internal and external, and in  
. bilious Fevers and Dysenteries ; but especially in bilious Flu-  
xions, the Stranourv. and bloodv Urine. The Decoction of

the Leaves and Bark, being drank, purges Wounds of Blood  
retain’d in them ; and is proper for.Women in Childbed, to  
cleanse the Uterus after the Pirih. These Canes, cut off and  
burnt in the Fine, weld a most fertile kind of Ashes ; in burning  
they make loud Cracks with aS great a Noise as the Explosion os an.  
hundred Guns ; for the Ain, which is stopp'd in by means of tthe Joints, being raresy'd, and wanting more Space, bursts its  
tnclosure on all Sides, and makes its Way out by Violence,  
They grow in the Sand of the Sea-shores. *Raii Hist. Plant.*

The *Gramen Arundinaceum,* Reed Grass, enumerated amongst  
the *Raeds* by *Dale,* agrees in Virtues with the common Reed,  
See **CALAMUS.**

ARYSTER, ἀρυστὴρ; from *desita,* to draw out, A sort of  
Vestel mentioned by *Hippocrates, Lib. orati yoviii* ; to winch he  
opposes ἄγγος μέγα, a large Vessel. *Foesiuss*

ARYTrENOIDES, άρήταινοειδάστ; from άρήταινα, a.Funnel;  
and ειδος. Shape. An Epithet of two Cartilages, which, tone-  
ther with others, constitute the Head *os* the Larynx. It is also  
apply'd to some Muscles of the Larynx. *Castellus. Biancard.*See **LARYNX. ‘ \_**

ARYTHMUS, or ARRHvTHMUS, ἀρυθμος ἤ ἄῤῥυθμος  
(from α Negative, and ῥυθμὸς, properly signifying a Modulation  
or Modification os Time and Sound in Music, but used to ex-  
press Order and Harmony in other Things). An Epithet apply'd  
by *Galen* to a Pulse not modulated according to Nature. It is  
opposed, he says, not to *Enrythrnus* (ένρυθμαοὐρ " modulated,'\*  
for every Pulse is modulated after some manner or.other; but to  
*Eurythmus,* (ἔυρυθμος) " justly modulated;'' so that *Enryth-  
mus* is a common Genus to *Arythmus* and *Eurythmus.. Ά Pul.,  
fus Eurythmus* is but one, and indivisible; but a *Pulsus Anyth- \  
mus* is of three Kinds, as *Pararythmus, Heterorythmus,* and  
*Ecrythrnus.* To shew what these are by\_an Example: Every  
Age has its natural Pulse, which, aS long as it keeps its due  
Rhythmus, or Modulation of Time and Force, is call’d *Eury-  
thmus* ; hut if it any way transgresses, it is a *Pulsus'Arythmus. If*it transgresses into a Modulation proper to the next Age, It is  
*Pararythmus* ; if it changes to a Pulse proper for any other Age,  
it is call'd *Hitcrorythmus*; but if it passes into a Modulation,  
proper to no Age at all, it. is then a *Pulsus Ecrythrnus.* The  
fame Judgment is to be form'd of Natures, Seasons of the  
Year, Places, and all other Things; for all have their determi-  
Hate *Rhythmus,* and, if this be corrupted, they pass into one or  
other of the three Classes of the *Arythmi* besore-mention'di  
*Galen, de Discs. Puls. Lib.* I. *Cap.* 9.

. AS, ASSARIUM, ἀβεάριον, μνια, sometimes means a particii-  
lar Weighs, in which Sense the *Raman As* is the same as the  
*Libra,* or *Roman* Pound, consisting of twelve Ounces. Some-  
times it signifies a *Roman* Coin, which was *of different Matter  
and* Weight, according to the different Ages of the Common-  
wealth ; therefore *Parro* derives the Word *As* from *Ass,* because  
this Piece Of Money was first made of Copper of a Pound  
Weight ; and *Ac, Acs, Ponda,* and *Mena,* among antient Au-  
thors, generally pass for the same. It is also used to signify an  
Integer, divisible into twelve Parts, whence comes ourWord *Ace,*or *Unit* ; and, for this Reason, some will have *As* deriv'd from  
the *Doric ats sot Its,* one. In *Galen, de Ponderibus et Mensuss  
ris,* the ἀωάριον is the Weight.of two Drams.

ASA DULCIS, the same as BENZOINUM, which see.

ASA FCETIDA. See SILPHIUM.

ASABON, Soap. *Rulandus. Johnson.*

ASssiSTUS, **ἄσαιστος.** See **CALCARIUs LAPIS,** and  
**CALX.**

ASAGEN, Dragon's-blood. *,Rulandus. Johnson.*

ASAGI, Vitriol, or *Atramentum Rubeum,* calcin'd Vitrioh  
*Rulandus.' Johnson.*

ASAMAR, ASAGAR, AsINGAR, Verdigrife. *Johns.*ASAMAZ, Vitriol. *Rulandus. Johnson.*

- ASAPEOS, ἀσαπέως, in *Hippocrates, Lib. de Rat. Vict. ire  
Morb. acut.* signifies the same, according to *Galen,* as ἀπἐπτως,  
that is, without Concoction. *Foesius. '.*

ASAPES, ἀσαπὴς» unconcocted; otherwise express'd by  
*Afeptus,* άσηπτὸςῖ ( from α Negative, and σήπω, to corrupt,  
putrefy) unputresy’d, according to the Notion of the Antients,  
confounding Concoction with Putrefaction. *Castellus.*

ASAPHATTIM is a fort of *Serpigo, Impetigo,* or intercu-  
taneous Itch, generated in the Pores like Worms : If the Skin  
be press’d, they come forth like oblong Tbreads, with a black  
Head. *Johnson.*

ASAPH LIS, *dcransis,* (from α Negative, and σαφὴς, clear,  
open) in *Hippocrates, in Prorrh. et Coac.* are fuch Patients as  
do not utter their Words in a clear manner. This Defect is oc-  
casian'd, as *Galen* fays. *Comm.* 2. *in Prorrh.* ήτοι διὰ τήν τῶν  
δια?.εκτικῶν ὸνγάνων βλάβης, ἣν δκ τῆς τῶν νεύρων κακάσεως ισχον,  
ἤ διὰ τὴν διανοίας doifer, either by some Hurt, which the Or-  
" gans of Speech have contracted from a Disorder of **the**" Nerves, or else by a Delirium.'' In the same Sense we are  
to understand ἀσαφὴς γλ,ῶωα. *Lib.* 7. *Epid, os* a muffled hesi-  
tating Tongue, that has no plain Utterance ; and ὰσάφε,α, in the  
same Book, means such a Confusedness of Voice as proceeds from  
an Indisposition *of* the Vocal Organs. ’Λσαφέες παρα4.ήσιες, *in*

*Zib.* I. *Prorrhet.* means a dubious kind of Delirium, which  
can hardly he dircovePd by the Attendants, or even by the Phy-  
sician. The Patient lies at Resh like one in a Slumber, some-  
times with his Eyes shut, as if betaking hirofelf to Sleep, some-  
times with them open, and his Hands thrown about, and em-  
ploy’d in searching and groping here-and-there : Now, because  
he lies quiet, and does not cry out, nor start up in bis Bed,  
like other phrenetic Patients, his Phrenfy or Delirium is staid to  
be ἀσαφὴς, " obscure or dubiousand, being join’d with a  
Coma in the Beginning, is to be accounted very dangerous.  
This is the Substance of *Galen’s* Comment on the risce.

ASARABACCA, the same as ASARUM, which see.

ASARCON, ἀσαρκον. from α Negative, and σάρξ. Flesh,  
stnctiy signifies void of all Flesh ; but is comparatively applied by  
*Aristot,* to the Head, in respect of the Middle and Lower Belly,  
compared with which it has but llttle Flesh.

ASARINA, a Species of As ARUM, which fee.

ASARITES, ἀσαρίτης, from ἀσαρον, *Afarum,* «rv^Wine,  
being understood, is Wine of *Asarum,* which is made by put-  
ting six Pints of Must to three Ounces of *Asarum.* This Wine  
is diuretic, and good for those who are afflicted with the Drop-  
,Jy or Yellow Jaundice, a distemper’d Liver, or the Sciatica.  
*Dioscoridcs, Lib.* 5. *Cap.* 68.

ASARUM, Ossic. Ger. 6S8. Ernac. 836. C. B. 297. J.B.  
3.548. Chub. 510/Raii Hist. I. 207. Tourn. Inst. 501.  
Bcerh. Ind. A, 2. 95. Dill. Cat: 36. Buxb. 28. *Afarum  
vulgare.* Park. 266. *Afarum vulgare rotundifolium.* Hist.  
Oxon. 3. 5I I. *Nardus rastica,* Hoss Flo. Altorssi ASSA-  
, RABACCA.

ASARUM is by fome called *Wold Nard*it has Leaves like  
Ivy, but much thicker, and rounder. The Flower grows in  
the Middle of the Leaves near the Root, and is of a blue Co-  
lour, resembling that of Henbane, and inclosing a Seed like a  
Grape-stone. The Roots are numerous, jointed, flender,  
running obliquely, resembling those of Dogs-grafs, but much  
slenderer, of a fragrant Smell, and taste very hot and hitiog upon  
the Tongue.

The Roots are heating, diurenc, and emetic, and are good  
in a Dropsy, or inveterate Sciatica ; they alfo provoke the  
Menses; six Drams thereof, taken in Hydromel, purge like  
, White Hellebore, They are also an Ingredient in Ointments.

AsARUM grows plentifully on shady Hills, and in the Coun-  
tries of *Pentus, Phrygia, Illyricum,* and the Territories of  
the *Vestines* in *Italy. Diosecrides, Lib.* I. *Cap.* 9.

It is called *Afaron,* as *Pliny* says, because it is not worn in Gar-  
lands. It has the Virtues of Nard. They dig it when it shoots  
forth Leaves, and dry it ; it very foon grows mouldy.

The Root of *Ajarabacca* consists of a great Number of  
slender Strings, of an aromatic Scent when dry. The Leaves  
are smooth, and of a Sea-green Colour ; of a thick firm Suh.  
’ stance, of a roundish Shape, somewhet hollowed in, next the  
Foot-stalk, resembling a Kidney ; among these arise the Flow.  
ers on short Stalks, in form of Cups, or brownish green Husks,  
divided atTop into three Parts, and containing Seed like Grape-  
kernels. It is planted with us in Gardens, and flowers in  
*June.* But the dried Roots are brought from *Leghorn.*

*Afarum,* according to *Pliny, [Lib.12. Cap.* I3. *et Lib.* 21.  
*Cap.* 6.] takes its Name from the *Greek* Word σαιτω, *to adorn,*and the privative Particle α, *without,* because it was not used  
by the Antients in adorning their Crowns and Garlands. It is  
also called the *Nardus Montana, Sanguis Mareis Mogorum,*and *Nardas Sylvestres, .and Rsestica, from* its Smell and Vir-  
:tues, resembling those of the Nard. The greatest Virtue is  
lodged in the Root, which is aromatic, very strong, and bums  
the Tongue like Ginger. But, according to *Georgius a Turre,*[Di *Hist. Plant. Lib. 2. Cap.* 23.1 rt scarce retains its origi-  
nal Nature and Qualities above a Year. *Hielrnrnt [De Mag.  
Vuln. Cur. p. m.* 479.] affirms, that it vomits, and sometimes  
purges very strongly. *Diofccrides* says, that an Iofusion of  
Sux Drams of its Root purges like Hellebore. It nevertheless  
loses a great deal of its emetic Quality by being boiled in Water.  
*~ Hielment, in Pbnrm. et Di [prist Modern. Sect.* 46. *Heura.*

*Meth, ad Praaein, Lib.* 2. *Moch. Etmullcr. Oper. Med. Tom.* 2.  
*p. m.* I5. The *Englise* affirm from their Experience, that the.  
Powder of *Asarum,* toiled in Wine, purges; and that, when  
7 boiled in Water, it excites a Discharge of Urine. It removes

Obstructions of the Liver and Spleen, purges the Body of all  
malignant Humours, strongly promotes the Menses, and expels  
the After-birth, and the f oetus, when dead. *M. Ruland. in  
These*i. *Med. a C. Beyger. Bd. p.* 77. fays, that a Decoction of  
*Asarum* Root, infallibly promotes the Monthly Discharges, and  
expels the Secundines, and dead Foetus. It dissolves the thick  
and viscid Matter lodged in the Lungs. See *J ch. Freytag.  
Auror. Mede Lib.* 2. *Cap.* 3i. *Gu. Rolstnc. Lib. de Purg. Veget.  
Sect.* I. *Art. 4. Cap.* 3. It is of great Service in the Jaundice,  
Dropsies, Pains of rhe Limbs, Goat and Fevers ; and is the  
' great Panacea of such as are afflidred with Quartan Agues. See

*Simon Pauli in sciuaar. Bot. Classe* 2. *Month. in Di use. Lib.* 3.  
*L.ap.* 42. *Alex. Pedemcnt. Secret. Lib.* I. *J. Steph. Strobelberg.  
Rem. Siagul. pre Cur. Febr. intr. p.* 28. *etRcy. Restes. Lentil.*

*Miscell. Med. Pr.p. ip.p.* I 97. *G. Hi. Valseh. CM. i.Eurii  
Cur. et Oof.* 664. It is principally used by the Country People  
in what they call a *Fever-cake,* in order to remove Fevers.  
*Petr. Bayrus, Lib.* I2. *Pr. Cap.* 6. fays it is of wonderful Effi-  
cacy in the Jaundice. *Jo. Soph. Kozak, Tm de Sale, Sect.* I 4.  
*Cap.* 6: affirms, that by its means he has restored many, who  
laboured under the Jaundice, to perfect Health. *G. Bandelet,  
Meth. Cur. Morb. Lib.* 3. *Cap.* 82. affirms, that in many In-  
stances, he found a Decoction of it to cure Sciatic Pains of long  
Standing. See also *Job. Ruel, da Natur. Stirp. Lib.* 2. *Cap.'S.*In the City of *Dresden* there was one *Lotichius,* Physician to  
the Court, who mixed the Root of this Herb almost with every  
Medicine he prescribed: See *Jsh. Michael Nat. in Job. Schrnd.  
Pharm. Med. Chyrn. p.* 60S. et 624. *Fride Haffmarn. Clav.  
Pharm. Schrnd. Lib.* 4. *Sect. 4.* Women with Child ought  
carefully to abstain from this Root, because it is very hurtfuI  
to the Feetus; though *Fernstius, Lib. 5. M. M. C.* I 3. informs  
us, that it may be given to Women in that Condition without  
any Danger. Its Leaves reduced to a Powder, and applied to  
the Pulse, occasion Sleep, and cure Fevers. *B. Montagnan  
Consil.* **I9I.** affirms, that a Plaister made of the Leaves of *Asa-  
rum,* and applied to the Region of the Kidneys, wonderfully  
cleanses the renal and urinary Ducts. If the Head is washed  
with any Lixivium, in which its Root and Leaves have been  
helled, it fortifies the Brain and Memory., tinges the Hair  
biack, and prevents its falling off. Its Root reduced to a Pow-  
der, and applied to old and foul Wounds, cleanses and cures  
them. If its Root is cut, and steeped in Rofe-water, the Li-  
quor removes Stains and Blotches in the Face. *Forest. Lila* 3I.  
**Oasc** 3. *in Schol, et Lib.* 4. *Obse Chir.* I I. When Hares,, and  
other wlld Beasts are indisposed, they eat this Herb, and find **a'**Cure in it. The Antients, observing this, did for that very  
Reason mix this Herb with Salt, and give it to their Sheep,'  
their Oxen, and Cows, in order to prevent a Putrefaction of  
their Flesh. When Horses will not eat their Fond, some  
People mix the Root of this Herb with Oats, upon which **the**Horses begin to eat, and are rendered sprightly. Some Women  
put its Leaves into new-drawn Milk, imagining that by their  
means it will produce more Cream than it would otherwise  
have done. This Herb was also by the Antients accounted  
good against Witchcraft. .ε—

*J eh. Fernelius, Lib. y. Meth. Mede* has a Composition,  
which he calls *Diafarum*; and which he at first prepared with  
a View to vomit. This Composition,says *Hor. Augen. [Epest.  
Med. Tom. i. p.* 297.] when exhibited at certain intervals,  
proves a safe and agreeable Vomit to Persons of all Ages and  
Sexes, and even to Women big with Child ., and with this very  
View it is prepared in many foreign Shops, where we allo find'  
the Extraol of *Asarum,* called also the *Coagulum Afari,* which  
is excellent in Disorders proceeding from Melancholy, cures  
the Jaundice and Falling Sicknefs, excites a Discharge of  
Urine, promotes the Monthly Evacuations, kills Worms, and  
cures Fevers, especially those of the Quartan Kind. Hare.  
*mann.Prax. Chym. de Vomitor. Sennert. lastit. Lib. 5. p.* 3.  
*Sect.* 3. *Cap.* 9. *Collectam Chymic. Leydense Cap.esu jobs Hilf.  
Jungken. Corpus Pharm. Chym. Med. Sect.* 3. *Cap. 12.* Many  
from its Leaves and Root distil a Water, which they prescribe  
for Oppressions of the Breast, the Jaundice, the Dropsy, Ter-  
tian and Quartan Agues. It must also he good for Disorders  
of the Eyes. *Job. Camer. Hart. Med. p.* 22. A- Conserve  
made of its Leaves fortifies the Memory and Hearing. *Croll.  
Tr. de Sign. intr. rcr. Mnrc. Ant. Zimar. Antr. Magico-Mede  
Pare.* **2. p. I I3.** *Hi Petraeus Nosol. Harm. Tom.* **I.** *Dissert.* **I I.***Sect.* 52. . .

The Juice of *Asarurn* has of late obtained great Reputation  
as a Vomit in Maniacal Cases. The *Pharmacopoeia Pauperum*gives the following Form: .

*An* **EMETIC DRAUGHT.**

Take of the Juice of Afarabacca, six Drams, or an Ounce;  
of Oxymel of Squills, half an Ounce; Carduus-water,  
two Ounces; mix into a Draught.

This is a very strong Emetic, and is inuch used at *Bedlam,*'amongst the Maniacs for rt will operate when neither Crocus,  
nor any of the common Mercurial Emetics, will move them.  
And it has been confirmed by all Experience, that fuch Pa-  
tients are much more difficult to he wrought upon than any  
others, either by Cathartics or Emetics, insomuch that they -  
will hear enough at a Dose for six or ten ordinary Persons;  
their Fibres, and all the Parts of the Brain, most administring  
to Sensation, being extremely clogged with viscid Humours,  
which this Medicine is very powerful in draining off -, and upon  
the same Account likewise it is of good Service as a Ster-  
nutatory; for it greatly drains the, Head by the powerful  
Twitches and Vellications it gives to the Fibres of the Nose,  
and Parts adjacent.

*Asarum Virginianum, Scrpentaria nigra,* **Ossic.** *Afarum  
Virginianum folio cordata Cyclaminis more maculato.* **Hist. Oxon.  
3. 5 I I.** *Ajaricm Virginianum Pestelechiae foliis subrotundis Cy-*

*alamini more maculatis,* Plut. Alrnag. 53. Phytog. 78. Ran  
Hist. 3. I29. *Asarum Cyclamini folio Virginianum,* Banis.  
MSS. Cat. *Scrpentaria maior Officinarum,* Bobart. BLACK  
SNAKEWEED.

This is the *Asiarum* of *Virginea,* with Leaves of *Pisiolochia,*spotted like Sow-bread, *Plalcenefs Phytographia, T.ab.* 78. *Fig.*and the Roots of it are brought over among the true *Serpenta-  
ria Virgins ana,* and are used promsscuoufly with them, heing  
accounted of the same Diaphoretic and Alexipharmic Nature.  
*Milleofs Bot. Oflsi.*

ASBESTUS, ἄσβεστος, from α Negative, and σβέννυμι, to  
extinguish; unextinguished, as κονία ἄσβεστος. Quick-lime. But  
this Word is often put substantively, *for* Quick-lime,. without  
the Addition of τίτανος, Lime. For its other Signification,  
**see AMIANTUs. . .**

‘ ASBO, ἄσβο, the Name of an unknown Animal, whose  
Fat, among others, is prescribed as an ingredient in a Plainer  
for the Pleurisy. *Myreps.us de Emplastris, Cap. yg.*

ASCALABOTES, ασκαλαβώτης; and καλώτης, a kind of  
Lizard, mentioned by *Galen,* II. *de Simp. Fac. and Lib. de  
Theridc. ad Pis. Cap.* 9. For a Description of it, see ALDRo-  
**vANDUs.**

ASCALONIA, ASCALONITIS, a Species, of CEPA,  
*Onion,* which see.

. ASCARDAMYCTES, ἀσκαρδαμύἀτης, from α Negative,  
and σκαρδαμήτἰω, to wink; in *Lib.* 2. *de Epidem, Sect.* 6. is  
one who keeps his Eyes long fixed and immoveable without  
Twinkling.

ASCARIDES, ἀσκαρίδες, (from ἀσκαρίζω, the same as σκαρίζω,  
**to** leap, palpitate, move, as ἄσταφις, and σταφἰς, ἄσταχυς, and  
στἀχυς, in *Hippocrates,* are the same thing) are expounded by  
*Galen,* in his *Exegesis,* to be ἔλμινθες ισχναῖ καὶ μικραι ἐν τῳ  
ἀπευθυσμένῳ ἐντέρῳ γεννώμεναι, " small (lender Worms bred in  
" the intestinum Rectum;and *Paulus, Lib.* 4. *Cap.* 58.  
*d.t AnsRaascAZi* ειδος ἐι'σιν ἐλμίνθων σκώληξιν παραπλήσιοι, συνἐ-  
στἀμεναι περὶ τὰ ἔσχατα τῆ άπευθυσμένου, καὶ τὰ πρῶτα τ.ῆ σφιγ-  
άΐῆρος, ἐνπφέρουσαι τῶν τοπων τούτων κνησμὸν ἰσχυρὸν» " The *Ase  
" carides* are a kind of Worms much like the Scolex, which  
" ledge about the Extremity of the Intestinum Rectum, and  
" Beginning of the Sphincter, and excite a Vehement Itching  
" in those r arts;" or, according to *Actuarius, Meth. Med.  
Lib.* I» *Cap. 7.t. are ddi* ἐρεθίζουσαο καὶ γαργαλίζουσαι τὸν κάμ-  
νοντα, " molesting the Patient with a continual Irritation and  
"Titillation.".' .

The Signs of these Worms, called *As.carides,* are a continual  
Itching in the Fundament, which sometimes causes feinting  
Fits andSwoonings; this Itching proceeds from the Motion  
ins these Worms, and the quick Sense os the Part where they  
lie; for we must not believe with *Mercurialis,* and some  
others, that the great Guts have only a dull sort, of Feeling,  
seeing that the Torments of the Colic, which are felt in the  
Colon, and Pains in the Intestinum Rectum, caused by the  
Wind inclosed therein, are a good Proof to the contrary.'

**REMEDIES** *against the* **ASCARIDES.**

-The *Asearides* are a Worm difficult to be expell’d, and that  
for several Reasons: The first is, because those Creatures are  
remote from the Stomach, so that Remedies lofe their Virtue  
before they can come where the Worms are. The second is,  
hecause the *Asearides* are wrapt up in Viscous Humours, which  
hinder the Operation of Medicines. The third is, because these  
Worms ascend sometimes into the Cscum. Now that Gut  
heing like the Bottom of a Sack, the *Asearides* keep themselves,  
as it were, intrenched in that Place. However it be, 'tis bet-  
ter to attack them below; and for that Reason there is no  
better Remedy, than to put up into the Fundament a Suppo..  
fitory os Cotton dipped into Ox's Gall, or in Aloes dissolved.  
One thing which I prescribed with Success to several Patients,  
was, to put up into the Fundament a littie Piece os Lard tied  
**to a** String, if lest there for some time; and aster that, if  
drawn hack, it will be full of Worms. Instead of Lard, you  
may use old Flesh salted. Clysters of the Decoction of Gen-  
tian are wonderful against the *Asearides.* You may add to the  
Gentian, Birthwort, Succory, Tansy, Arse-smart, Orach, and  
make a Decoction of it in Water and White-wine; When it  
is done, you may add a littie of the Confection of Hiera.

For Children you may use the following Clyster;

Take Mallows and Violet-leaves, of each a Handful; Cole-  
wort-leaves, one or two Handfuls; Coriander and Fenel-  
Seeds, of each two DramS ; Flowers of Chamomile, and  
the Lester Centaury', of each a littie Handful t Make a  
Decoction of the Whole in Milk, and dissolve in thestrained Liquor an Ounce os Honey, and two DramS of  
the Confection os Hiera.

*Hippocrates* advises, for the expelling of the *Asearides, to*take Agnus-castus-seed, to bruise it well with a little Ox-gall,  
**and** then **to** mix the Whole with a little Oil of Cedar, and

make a Suppository of it with a little greasy Wool *Andry.* See  
**LUMBRICI and VERMES.**

ASCELES, ἀσκελῆς, from α Neg. and σκέλος, a Leg. With-  
out Legs. *Galen de Hippoc. et Plat. Decr. Lib. An Cap.* 4.

ASCENDENTIA, Ascending ; spoken of the Signs or  
Constellations of the firmament of Heaven, and especially of:  
the Sidereal Spirits; *Castellus* from *Dornatus in Dict. Par.*

ASCENSUS MORSI, the Ascent-os a Disease, is the same  
as the *Augmentum* or increase os the same. See AUGMEN-  
TUM. *Ascensus* also, or *Ascensio,* signifies a manner of chy-.  
mical Sublimation and Distillation, oppos'd to *Descensus.* See  
**AQUA. . .**

ASCESIS, ἄσκησις, from ἀσκέω, to exercise. The same as  
EXERCITATIO, Which see;

ASCETES, ἀσνριτής. The same as *Athleta,* or *Athletes, z.*Wrestler. Thus ασκητέον; in *Erotian* on *Hippocrates,* is ex-  
pounded by ἀθλητὴν ; for *Asceta* he says, are called by the  
*Attics, Athleta.*

' ASCHEMON, άσχήμων, from α Neg. and σχῆμα, a Form,  
or Figure; deformed ; ἀσχημονέστεραν σκέλος, a more deformed  
Leg, *Hipp. Lib. de Artic.*

ASCHIA, *Tbymallus,* Ossie. *Thymallus,* sichrod. 5. .333;  
Salv. de Aquat. 8I. Jons, de Pisc. SI. Aldrov. de Pisc. 593.  
Charlt. de Pisc. 36. Ran Ichth. I87. Ejusd. Synop. Pisc. 62.  
Bellon, de Aquat. I82. *Tbymallus, feu Thymus,* Gesn. de  
Aquat. 978. *Thymus,* Rondel, de pisc. 2.187; THE GRAY-  
LING, or UMBER..

, This Fish resides in rapid, shallow, and stony Streams, and -  
is esteem’d excellent Food. The Part us’d in Medicine is the  
Fat, which is said to take away. Specks and Pearls from the  
Eye : Melted in the Sun, and mix'd with Honey, it takes  
away Freckles; and Marks left by the Small-pox. *Dale.*

ASCIA, σκέπαρνος ἤ σκόπαρνον, properly an Ax, or Hatchet,  
but, by a Metaphor, taken from the Figure, used to signify a  
fort of simple Bandage, which .is described by *Galen, Com.* 2.  
*in Lib. de Art.* The *Aseia* is a sort of Bandage, that declines **a**littie from the Transverse. And, on *Hippocr,* ἐν τῳ κατ' ιητ.  
he telis us, that *Hippocrates* calis the Bandage which declines  
but a little, *Aseia,* and what considerably, declines, *Sime.* Now  
*an Aseia,* he says, in a Carpenter's Tool, which towards its  
Extremity, hy which it cuts the Word, is gentiy incurvated,  
and shelves away like a Rock. But *Erotian* seems to give us  
the clearest Idea of it, from *Asclepiades,* ἐιςτὸ ἰητρ. as follows; ..  
ἔστι γὰρ ὁ σκέπαρνος, οταν ὁ ἐπιδοσμος ἐμαβάλλων ἀυτὸς ἐαυτῳ,  
καὶ χιαζομενος, κλάσιν τινὰ ποιῆ καὶ γωνίαν, διον οταν ὸρθολοξος ’  
ἐπιδεθστ " The *Aseia* is, when the Fillet, aster one Revolu-  
An tion, runs into the Figure of the Letter χ, . making a  
" Break and Angle, as in the Rectoblique Bandage." This  
agrees with that of *Hippocrates de Fract.* ἐπιδεσίων γάρ ἐστι  
ἄυτ» ποικιλωτάτη, καὶ- ,πλείστους μἐν σκεπάρνους ἔχουσα. " This  
." Bandage has the greatest Variety, and a Multitude of *Aseia gi\**and in the same Sense is σκεπαρνηδὸν used. *Libs de Fract.*

ASCITES, ἀσκίτης; from άσκός, a Bottle, because it distends  
the Belly in Form of a Bottle. A Species of Dropsy. . See  
**HyDROPs. -**

ASCITICUS, ἀσκιτικός, one who labours under an *Ascites.*

*Fllancard. mi*

ASCLEPIADA.

The Descendants of *Alseulapius,* called *Asclepiadae,* have been  
said to preserve Medicine in their Family without any Inter-  
ruption; but of this we should have a more distinct and accu-  
rate Knowledge, if we had the Writings of *Eratosthenes,  
Phcrecydes, Apollodorus, Arius* of *Tarsus,* and *Polyanthus* of  
*Cyrene,* who took care to write the History of these Descen-  
dants of *AEfculapius* ; hut though the Works of these Authors  
are lost, yet we have the Names, at least, of some of the *Ascle-  
piadae* preserved, as appears from- the Catalogue os the Prede-  
cessors of *Hippocrates,* who called hirnsels the Eighteenth De-  
scendant of *JEseulapius.* Now the Genealogy of *Hippocrates*is still entire, and stands thus :

That *Hippocrates,* whose Writings are handed down to us,  
was the Son of *Hiraclides,* who was the Son of another *Hip-  
pocrates,* the Son of *Gnosidicus,* the Son of *Nehrus,* the Son of  
*Sostratus* the IHd. the Son of *Theodore* the Second, the Son of  
*Cleomytideus* the IId. the Son of *Cryfamis* the IId. rhe Son of  
*Sostratus* the IId. the Son of *Theodore* the First, the gon of Cry-  
*famis* the First, the Son of *Cleomytideus* the First, the bon of *Dar-  
danus,* the Son of *Sostratus* the First, the Son of *HoppolOchus,*the Son of *Podalirius,* who was the Son of *AEs.culapius; Ste-  
phanas Byzantinus* ascribes two more Sons to *Gnosidicus,* be-  
sides him already mentioned ; one of whom was called *.Emus,*find the other *Podalirius. Nehrus,* the Father 0f *Gnosidicus,*had also another Son, whose Name was *Chrysus..*

This Genealogy may possibly he thought sabulous. bus, grant-  
ing that there was some Error, or something of a fictitious Na-  
ture, in this Succession, of the *Asclepiada,* 'tis, at least, certain,  
that several Branches of- the *jEseulapian* Family were known,  
besides that of *Hippocrates,* before his Time; and that the  
particular Branch os it, from which that Physician sprung, was  
distinguished by the Name of the *Asclepiadae Nebrides,* er

the Descendants of *Nabrus,* who had become particularly *far*mous in Physic, and of whore Skill the Priestess of *Apollo* had,  
in one of her Responses, given a very great Character, as *Sa-  
phenus Byzantinus* observes.-

There were still more Branches of the *Aselepiada* spread up  
and down in different Parts, and they bad even established three  
famous Schools, one at *Rhodes,* which failed first by the Ex-,  
tinction of that Branch of the Successors' of *Aesculapius*; and  
this probably happened, long before the Days of *Hippocrates,*since he makes no Mention of it, as he does of that of *Cnidas,*which was rhe Third, and that of *Cos,* which was ‘the Second.  
These two last flourished .at the same Time with the School of  
*Italy, of* which were *Pythagoras, Empedocles,* and other Phi-  
Josephers, who cultivated Physic, though at the same time the  
*Greek* Schools were much more antient. As these were the only  
three Schools which made any Noise, so they hed a mutual  
Emulation, and were for ever contending for the greatest Im-  
provements in Physic. *Galen,* however, gives the Preference  
to that at *Cos,* as having produced the greatest Number of fa-  
mous Difciplcs, among whom was *Hippocrates.* That of *Cal-  
dos was* ranked in the second Place, and that of *Italy* in the  
third. .

*- Hcrodolus'lib.* I. also speaksofa School ofPhysicians at *Cyrene,*where *Aiseulapius* had a Temple, in which the Service was dif-  
ferent from that practis’d in *Greece.,* which may fay a Founda-  
tion for suspecting, that in that Nation there might have been  
*Asclepiadae,* of a different Sort from the others.

The same Historian in the above-quoted Book allo mentions  
**a** Medicinal School at *Crotena,* the. native Country of *Demo-  
cedes* the famous Physician, who was contemporary with *Pytha-  
- guras.* This Physician, according to *Herodotus,* being banish’d  
hy the Crueltyof his Father *Calliplam,* arriv’d first at *Algina,*and afterwards at *Athens,* where he was had in great Esteem.  
From thence be went to *Samos,* where be had an Opportunity  
of attending *Polycrates* King of that Ifland,- and the good For-  
tune to cure him of a very terrible Disorder, for which he re-  
ceiv’d two Talents *of* Gold. Some time after, being taken  
Prisoner by the *Perstans,* he concealed his Profession, but was  
at last discover’d, and compil’d to employ his Skill for the  
Relief of *Darius,* who was rack’d with Pain in Consequence of,  
**a** Disiocation of one of his *Ancles.* He had also for .his Patient  
Queen *Atsssca,* Wife to the same King, for a Cancer in her  
.Breast. The Historian adds, that having heen successful in  
both these Cures, *Democedes* receiv’d very rich Presents, and  
acquir’d fo great a Share of the King’s Favour, that he was  
invited to eat at his own Table. But finding an Opportunity  
- of returning into *Greece,* on account of a Promise he bad made  
to act in Quality of a Spy, he remained in it altogether, de-  
spising all the Honours they hed paid him in *Persta,* and laugh-  
ing at thofe who hed given him a Commission to hetray his  
native Country. He was afterwards marry of to a Daughter of  
the famous *Mile* his Countryman.

We know no other memorable Circumstances relating to  
the Physic of *Dernccedes,* or that of the other Physicians of *Cro-  
tona :* Neither heve we any thing of Importance to fay con-  
cerning the School of *Rhodes.* As for that of *Italy,* ’tis post  
stole *Polycletes* might helong to it, since he was Physician to  
*Phalaris* the Tyrant of *Agrigentum,* the Town of *Sicily, in*which that School was. - -

We may judge of the Method follow’d in the School of  
*.Cnidas,* by forne Hints of *Hippocrates* relating to thet Affair.

\* “ Those, fays he, *[De Ratione Victus in Acutis, Lib.* I.] who  
"" have compiled the *Cnidian Sentences,* have very well de-  
.“ fcrrbed whet Patients suffer under every Diseafe ; how fome  
" Symptoms of their Disorders happen ; and,tio a word, all  
“ that any Perron ignorant of Physic could write, *after in-*

quiring of Patients what their several Ailments were., hut  
“ they heve forgot most of whet a Physician ought to know,  
\*" without hearing the Report of the Parient ”

The same Author besides observes, thet the *Cnidians* used  
very few Medicines; for *Elateriurn,* which is a Purgative ex-  
- trailed from the wild Cucumber, Milk, and Whey, made up  
almost the Whole of their *Materia Medica.* From what *Hip-  
pocrates* here says, we may gather, that these Physicians were  
content with giving arr Enumeration, or exail Description, of  
the Symptoms attending Diseases, without giving themselves  
the Trouble to inquire into their Causes, Or prognosticate  
their Events; we may also gather from what he fays, that  
they only ufed a very small Number of Medicines, the Virtues  
-of which they and their Predecessors had disooveFd by Ex-  
perience.

These two Observations are sufficient to convince us, thet  
the *Cnidians* were little more than Empirics, or, at least, that  
they did hot value themsidves on the Accuracy and Justness of  
their Theories. The farthest they went in this Way, was  
sometimes-to reason from *Analogy,* or a Comparison of Diseases  
and Remedies, as we may see by rbe Example *Galen* gives us  
of it in these Words: " The *Cnidians,* fays he, attempted  
"to cure Abfcesses of the Lungs in this manner; As they  
I" hed observed, than a Cough oecasions a Discharge of any

f( Matter in the Lungs, they pull’d the Tongues of those  
" who labour’d under Abscesses of the Lungs, without their  
"" Lips, and endeavour’d to convey some Drops of Water into .  
" the *Aspera Arteria,* with a View to excite a violent Cough,  
"\* which in their Opinion made them discharge all the *Pus*"" contain’d in their Breasts: ”

As for the Physicians of *Cos,* it may he also said of them, if the  
*Praenotiones Coaca,* sound among the Works of *Hippocrates,*are ouly a Collection of Observations made by these Physicians,  
as many of the Antients believed, that they were not great  
Reasoners ; and we plainly perceive, that they were not at the  
Pains. to account" for their Prognostics: *Hippocrates* was of  
the Numher of thefe Physicians, and we know of no more  
of them, except his Predecessors,, whom, we, heve already  
mentioned.

Whet we heve said proves, that what *Pliny* and *Celsas* have ad-  
vanced, is not absolutely true, when they raid, that we had no  
Accounts of Physic during the interval theyhavemention’d; and  
still less true, that Physic only began with Phllosophy, as *Celsas*affirms ; unless he means rational Physic, or that which is  
employ’d in investigatiog the hidden Causes, of Diseases, and  
accounting for the Operations of Medicines. This sort of  
Physic had, indeed, little Existence in the World, before the  
Arts and Sciences came to be cultivated.

- It may possibly be thought, thet I forget one Circumstance,  
which not only does a great deal of Honour to the *Asclepiadae,*but intirely overthrows what *Celsus* and Piiny have advanced. and  
even what I myself affirmed, when I said that *Cha Aselepiada u/atn*llttle more than Empirics; and thet is, that they were look’d  
upon as great Anatomists. Galon,, .’tis true, was of this Opi-  
nion : " At the Time, fays he, when Physic was confin’d  
"" to the Family of the *Asclepiada,* the Fathers taught their

Children Anatomy, and from their Infancy trained them  
r" up to the Dissection of Animals, fo thet this Branch of  
"‘ Knowledge passing from Father to Son, like a manual Tradi-  
tion, as it were, it was to no Purpose -to write down the  
"" Manner in which these Dissections were performed, since it  
was as impossible they should forget it, as that they should  
forget the Letters of the Alphahet, which they learned al-  
“ most at the fame Time. ”

. There are still some other Passages of this Author, from  
**which** we perceive, thet he helieved, thet the *Aselepiada* were  
perfech Masters of Anatomy. But to his Authority we may  
oppose thet of an antient Commentator upon *Plats,* who asserts  
that the Philosopher *Alcmaeon* was the first who differed an Ani-  
mal ; which destroys what *Galen* affirms of the *Aseleplada,* at  
least, of fuch of them as came before *Alcmaeon,* whe are the  
Persons of whom we now speak; as for those who came after  
him, they were either contemporary with *Hippocrates,* or suc-  
ceeded him. But though the Testimony of *Hippocrates,* in this  
Case, were not to he depended on, yet we may conclude from  
the small Progress they had in his Days made in Anatomy, that .  
till then the Bedies of Animais had been very .superficially in-  
quired into ; which is quite the Reverse of what *Galen* says,  
when he affirms, that *Acatomy.was in its Perfection in the Pays  
of the* Asclepiadie.

I would not by all this insinuate, that the *Aselepiada* were  
entirely ignorant of the Parts of the human Body, since withe  
out fuch a Knowledge they could neither practise Physic in  
general, nor Surgery in particular; which, by the way, they  
understood better than any other Branch of the Business. But  
the Knowledge they hed in. Anatomy was in a great measure  
owing to what they observed in the killing of Beasts, and in  
their Sacrifices. They were also very industrious in improving  
themselves in *Anatomy,* if.at any time they found in. the Fields  
human Bones stript of their Flesh by wild Beasts, or wasted by  
'Time ς or when they found the Bodies of Travellers killed by  
-Robbers, or those of Soldiers killed in Battle. It is also possi-  
ble, thet the *Aselepiada* might heve got acquainted with the  
Improvements of the *Egyptians,* who embalmed their Dead set  
Preservation. But their chief and principal Scene of Improve-  
ment was in the Practice of Surgery, where in the Cute of  
Wounds, Ulcers, Tumors, Fraciures, and Diflocations, they  
hed an Opportunity of discovering in the Living, what 'they  
wanted sufficient Opportunities of sinning in the Dead, *Lie  
Clerc. ...*

ASCLEPIADES. . \_ si

Though the Deseendants.of*Aesculapius* wer&called the *Ascle-  
piada,* that is, the Children of *Aselepius,* which is the *Greek*Name of *Aiseistapius*. yet there was a Physician of the Name  
of *Asclepiades,* who was not of that Family,

This Physician was in-great Reputation at *Pome,* during the.  
Life of *.Mithridates,* that is, towards the Middle of the Thirty-  
ninth Century, according to the Testimony of *Pliny, from*which I conclude, that mis Anther contradicts himfelf, when ,  
he fays, in the fame Chapter, thet Physic was not known in  
*Pome,* till after *Pompey’s victory* over *Mithridates. Acckaga-  
thus,* a *Greek* Physician, tarns to *Rome* about an hundred Years  
before ; where, on his first Appearance, he was well received ;  
but.his Profession was afterward\* brought into Disgrace, Now

in all Probability, this *Asclepiades* was one of' the first who re-  
established its Character and Reputation. This Physician [ac-  
cording th *Pliny, Lib.* 26. *Cap.* 3.]'Was a Native of *Prusu in  
Bithynia,* but happened at last to settle in *Rome,* in Imitation  
os a great many other *Greeks,* who had now begun to establish  
themselves in this Capital os the World, hoping there to ac-  
iquire greater Riches than in their own Country. Upon his  
first Appearance in *Sarne,* he taught Rhetoric; but not finding  
his Expectations answered by that Profession, he resolved to try  
whether that os Physician would not he more fortunate to him;  
and though, according to *Pliny,* he had at that time no Know-  
ledge of the Business, yet he imagined, that by the Bright-  
ness of his Genius, he should soon surmount the Disadvantages  
arising from his not having been regularly bred to Medicine.

The Method this Physician used to establish his Character  
was, to run directly counter to the Practice of *Archagathus,*who had been condemned for his Cruelty ; and to decry not  
only his Method, hut also a great Part os the Medicines daily  
recommended by other Physicians. The Practice of *Asclepiades*consisted principally, [according to *Pliny, Libs* 26. *Cap.* 3.] in  
throwing the Patient into a Sweat, by means os warm Cover-  
ings, or by exposing him to the Heat of the Fire, or the Rays  
of the Sun. *Asclepiades* also condemned the antient Manner of  
curing QtunseyS by’ thrusting an Instrument forcibly down the  
.Tbroat, in order to clear the Passage. But of all other things,  
he made the highest Remonstrances against Vomits, which, in  
these Days, were frequently used ; and even against Purgatives,  
which he looked upon as hurtful to the Stomach.

At the same time that *Asclepiades* condemned and decried the  
above Medicines, he substituted in their room very mild ones,  
saying. *Tuto, celeriter et yucunde, id Votum ests* But adds  
*Celsos, Lib.* 3. *Cap. 4. Sed fore periculoso esse nimia et Festi-  
natio et Foluptas solei.* It were to be wished, that Diseases  
could be cured surely,' soon, and agreeably ; but Attempts to  
cure too suddenly, or by means of too agreeable Medicines,  
are generally attended with Danger/ ' ’  
I The superstitious Methods of curing Diseases; or the Magi-  
cal Remedies, of which, before the Arrival of *Asclepiades,* they  
were so fond, which *Cato* himself had on some Occasions  
ufed,. but which were. beginning to be in Discredit, contri-  
. buted not a littie to the favourable and ready Reception of  
9 this new Physic of *Asclepiades.* This Observation *Pliny* makes  
in the Beginning of his twenty-sixth Book, where he uses these  
Words: *The Panity os. Mario was a Circumstance of more Use  
to him than any thing else.* One *Doringius,* a *German* Author,  
*'de Medicina et Medicis,* not adverting thet these Words of  
*Pliny* had a Relation to what he had said in the Beginning of  
the foregoing Chapter, explains this Passage, aS if *Pliny* had  
intended to say, that *Asclepiades had, in a particular manner,  
ufed Magic in his Practice of Physics* which is quite the Re-  
verse of whet *Pliny* thought, and inconsistent with the Cha-  
racter of *Asclepiades,* who was an *Epicurean.*

" 'Till the Days of *Aselepiades,* says *Pliny,* Antiquity stood  
" it well out. In Vain did *Herophilus* advance his refined Spe-  
" eolations; neither he, nor any of a like Character, were  
" followed universally; and considerable Remains of antient  
" Physic as yet supported themselves, with all the Authority  
" they had ever acquired. But this second *AEfculapius,* having  
" reduced all the Learning of a Physician to the Knowledge  
" or Investigation of the Causes of Diseases, Physic, which  
" at first was an Art founded on. Experience, became *eon-  
X( sectoral,* and entirely changed its Face." .

What easily gained a Party to *Asclepiades,* to the Prejudice  
of antient Physic, and made People relish his Reasoning, was,  
- his using very mild and gentle Remedies, which *Pliny* reduces  
to five: Abstinence from Food ; Abstinence from Wine on  
certain Occasions ; Frictions ; Walking ; and Gestation. As  
'People saw, that they could easily submit themselves to these,  
they judged the Physic of *Aselepiades so* much the better for its  
heing easily practised. Besides, heing Very eloquent, and a  
great Philosopher, he attracted the Esteem almost of all Man-  
kind, and was looked on as one sent from Heaven. - .

*Pliny* adds, that this Physician had the Art of. gaining the  
Affections of People by certain Stratagems peculiar to him.,  
self; such as promifing ins Patients Wine, and actually giving  
them some ojT proper Occasions, and allowing them to drink  
cold Water, in order to refresh themselves. And as he had  
been among the first who used this Remedy, he took a certain  
Pleasure in heing called Δοσίψυχραδο, or *The Giver of coldJPater.*Wine, in the mean time, contributed no less to the Establish-  
ment of his Reputation. *Apuleius* says, that *Aselepiades* was  
the first of the Physicians, who prescribed Wine for the Relief  
Of his Patients; and the same Author afterwards telis a Story  
of a Man being restored to Lise by *Aselepiades,* after he was  
thought dead, and ready to he interred. He does not indeed  
‘mention his using Wine upon that Occasion ; hut from whet  
he had before said, one may inter, that the Miracle was  
wrought by means of that Liquor, though the Author ascribes  
the Recovery of the Man to certain Medicines which *Aselepiades*gave him.

This Physician also contrived; almost every Day,' seine hew  
Invention to please and humour his Patients: He ordered then!  
to be laid in pensile Beds, which were a Species of Cradles  
snaked, in order to lust the Patients to steep, or mitigate these  
Pains. He also invented an hundred new Sorts of Paths, **some**of which were pensile. "

This is,, according to *Pliny,* the Character of*Aselepiades,*hut as that Author is suspected of Partiality in characterising,  
we shall inquire what Sentiments others entertained concern- .  
ing this Physician. - -

We find then, that almost all the Antients give a favourable  
Character of *Aselepiades: Apuleius* styles him *The Prince,* or  
*First of Physicians,* after *Hippocrates.* He is also hy *Sccibo:.  
nius Largus [in Epistol, ad Callistum]* called, *A dory great  
Author in Physic.* And *Sextus Empiricus, Adversius Mathe-  
maticos, Lib.* 7. calls him *A Physician inferior to none. Celsius*also had him. in great Esteem. Another Proof of the great  
Reputation he had acquired, was his being desired by *Mi-  
thridates* to assume the Character of his Physician., But a  
Circumstance of all others the most advantageous to his Cha-  
racter is, his having been the Physician and intimate Friend 'of  
*Cicero,* as he himself testifies, [De *Oratore, Libs* I.J and at  
the fame time- seems tsspay a great Deference to his Eloquence,  
which proves that this Physician did not quit the Profession of  
Rhetorician for want of. a Capacity. . . .. . '

*Galen,* who declares himself against the Practice of *Aselepsu  
ades,* yet owns him to be Very eloquent, but upbraids him with  
being a Sophist, and having a Practice of contradicting eversi  
one he had any thing to do with. *Caeltus Aurelianus, Acutor:  
Lib.* I. *Cap.* 15. charges him with the same Fault. When *Asele-  
piades,* says he,. was called to a Patient who had another Phy-  
sician, he condemned ail the Medicines that Physician had  
ordered, and approved os others which he had not mentioned,  
as if the same Medicines, which, when ordered by others, were  
noxious, became safe and salutary, when prescribed by him.  
The Author last quoted, draws this Consequence from a Pas-  
sage in one of the Books of *Aselepiades,* where, in speaking of  
the Cure of a Phrensy, he says, that if a Person labouring  
under that Distemper should fall, into his Hands, hefore having  
come through those of any other Physician, or. used any other  
-Medicine, that in that Case he would use external Applica-  
tions of strong-scented Substances, such as Castor, Hogs-fenel,  
Rue, and Vinegar, or the Liquor in which these Substances had  
heen infused ; and that he would afterwards order him a Clyster  
to relieve the obstructed Parts ; but,, said he, if another Physi-  
cian has before dealt with the Patient, all Cataplasms, Oiis, and  
strong-scented Medicines, must be discharged in the Very Be-  
ginning of the Cure, and the Patient must be removed from **a**dark Place to a clear and open Light. 'Tis possible, *Aselepiades*might not have followed this Practice from a Principle os Envy  
or Contradiction, as *Caelius Aurelianus* insinuates, but from a  
quite different Motive. As the same Disease may sometimes be  
cured by different Methods, he might possibly believe, that Sue-  
cess, on some Occasions, might attend a Change of the Me-  
thod os Curs, from whet it was in the Infancy of the Disease,  
or the passing from the Use *os* cold to hot Medicines, and from  
hot to cold. AS a Proof, that *Aselepiades* entertained this No-  
tion, he calls the Cure here mentioned, bold and extraordi\*  
nary, not to he undertaken but in desperate Cases.. ...

- Pieces os Practice like this undoubtedly made People who  
were ignorant of the true Principle upon winch *Aselepiades*acted, conclude, that he was an errant Quack. This is the  
Idea which *Pliny* seems to entertain of this famous Physician,  
in what he has thitherto advanced concerning him ; and we  
-can have no Reason to doubt, that this -was his real Senti-  
-mens, if we consider the finishing Stroke os. these Enco-  
miums, which he pretends to bestow upon him [in *Lib.* 7.  
*.Cap.* 37.]. *“Asclepiades,* fays he, having, bid a Defiance to  
." Fortune, by saying, he consented not to be esteemed a Phy-  
" stcian, if ever he was attacked by any Disease whatever,  
." remained Victorious in this Point; for he died in an extreme  
" old Age, and that by an accidental Fall from a Stair-case.'?  
It is not probable, that a Man of so philosophical a Turn as  
*-Aselepiades* was, would heve talked in so ridiculous and foolish  
a manner.

- We should be better able to form a Judgment of the Senti-  
ments of *Aselepiades,* if his Writings had reached .our Hands;  
but they are lost, as well as a great many other Valuable Pieces of  
. Antiquity, which would heve undoubtedly given us Satisfaction  
with regard to a great many things, of which we must now he  
contented to remain ignorant. Tho' *Aselepiades* might not,  
possibly, have been a Model for the Direction os Practice, yet  
there would have been a certain. Pleasure in reading his Works,  
-since 'tis to he presumed they were beautifully written; and if  
vthey had not heen a Standard for Physicians, they would have,  
at least, proved an Amusement for Philosophers, and served to  
illustrate the Doctrines of *Epicurus, Lucretius,* and *Democritus.*As the Reputation of this *Aselepiades* was very great, both  
-during his Lise, and after his Death, so he had a great Number  
of Disciples and Followers,

Countries, where it in natural, is succeeded by two.long flender  
Pods, containing small stat Seeds, lying among a silky Down;

It grows with us only in Gardens, and flowers in ***Tune.'***

The Root, which is the only Part used, and that not Very  
often, is accounted a mighty Counter-poison; both against the  
bad Effects of ***Apocynum,*** and other poisonous Herbs, and  
against the Bites and Stings of Venomous Creatures: It is also  
helpful against malignant pestilential Fevers, which it carries  
Off by Sweat ; it is good likewise against the Dropsy and Jaun-  
dine. ***Melleofs Bot. Os.se***

The. Roots of ***Swallow-wort*** are bitter, acrid, and give a  
faint and red Colour to the blue Paper; the Leaves taste a littie  
saltish, and give the same Paper a fainter red Colour, which .  
makes me believe the Salt os this Plant is, in some measure,  
like the Oxysal Diaphoreticum of ***Angelas Sala,*** a fixed Salt, a  
little too much impregnated with Acid ; hut in the ***Sutalloutr  
wort.*** It is involved in a great deal of Sulphur and Earth: Thus  
it is no wonder, that this Plant should be sudorific and deter-  
five. ***Tragus*** affirms, that the Wine in which a Pound of its  
Roots has been macerated, and boiled to the Consumption of  
a Third-part, powerfully provokes Sweat, and gives ease to  
those who are troub'ed with the Dropsy: The Decoction of  
this Plant renders the Humours Volatile, and works both by  
Urine and Transpiration. This Decoction is preferable to that  
of ***Scorzoncra,*** in malignant Fevers, and the Plague. ’ For the  
Suppression of the Menses, put one Ounce of the Root of  
***SWalloW-Wort*** in a Pint of boiling Water; strain the Infusion,  
and give three Glasses of it to drink every Day, with the Sy-  
rup of Mugwort, or the Cachectic Aperitive Syrup of M. ***Cha-  
ras,*** which is also Very good for the Biting of a mad Dog. The  
Extract of its Roots and Leaves, from half a Dram to a Dram  
and an half, has the fame Effect. The Herb, applied as a Ca-  
taplasm, dissolves the Tumors of the Breasts ; the Powder of  
the Leaves and Root cleanses Ulcers, as well as that of Birth-  
wort. ***MartyofsT.ornefort.***

ASCLEPIOS, ἀσκλήπιός, the Name of a dry Smegma, de-  
scribed by ***P.Aiiginet. Lib.*** 7. ***Cap.*** I 3. and os a Troche in  
***Aetius, T.et. An Serm.*** 2. Cap. 50. also of a Collyrium in ***Galen,  
de C. Μ. S. L. Lib. .4. Cap.*** 7. from ***Scribonius,*** winch is also  
called ***Atheneppum.***

ASCLITES, a corrupt Word, used by Mistake, instead os  
***Ascites,*** by ***Paracelsus*** and ***Avicenna. Castellus.***

ASCOMA, ἄσκωμα, from 'ἀσκός, a Bottle: The Emi-  
nence of the Pubes at Years ***of*** Maturity, most properly in the  
Female. ***Ruffus Ephesius.***

ASCOS, ασκὸς, a Bottie. Ἀσὰός σκύτινος, (from ***ccirsifn***Leather) was a Leather Bottie filled with some Matter, aS hot  
Water, or Oil, for the Fomentation and Wanning of a  
diseased Part, and prescribed by ***Hippocrates, Lib.*** 2. ***de  
Morb.*** to he applied to the Forehead sor easing Pains os the  
Head.. He uses also the ***Aseos*** inflated withWind, for restoring  
a gibbous Affection of the Spinal Vertebrae, and a Luxation of  
the Os Femoris, ***Lib. de Ariic. Galen,*** in his ***Exegesis,, ex-  
pounds ἀσκοῦς*** by κεραμοὑς, όυς καὶ πυριατοδο καὶ φακοής ὸνομιάζουσιν,  
" Earthen Pots, called also ***Pyriaii,*** and ***Phace,”*** (Lentils)  
that is, Vesseis os a lenticular Figure, used in Fomentations.  
***Celsius, Lib.*** 2. ***Cap.*** I7. speaking of Fomentations, -says, .testes-  
***etiam calide Oleo replentur Utriculi, et in suaso fictilia ad Si-  
militudinem, quas Lenticulas vocant. Aqua consuitur.*** Ci More-  
" over. Bottles are filled with hot Oil, and Water is put into  
" Earthen Vesseis, from their Figure called ***Lentils.” Galen***seems to confound the ***Utriculi*** with the ***suasu fictilia.*** Fomen-  
rations by these Earthen Vessels, and ***Utriculi,*** or littie Leather  
Bottles, and Bags, are also prescribed by ***Hippocrates, Lib.*** 2ι  
«περὶ γυναικ. and Fomentations with the ἀσκοἰ, or ***Utriculi,  
Lib. J. Epid,*** and ***Lib. de Rat. Pict, in Acus.*** for a ***Tetanusy .***

AoCYRUM, Ossic. Get. 434. Emac. 542. Raii Hist, ***n***IoI9. Merc. Bot. I. 2I. Phyt. Brit. I2. Mer.Pin. II. ***Asiya  
rum vulgare.*** Park. Theat. 574. ***Hypericum As.cyron dictum.***Chain 445. ***Hypericum As.cyron dictum, caule quadrangulo,***J.B. 3.-382. Raii Synop. 3. 344. Toum. Inst. 255. Elem.  
Bot. 222. Boerh. Ind. A 24I. Dill. Cat. Gissi I7I. Rupp.  
Flor. Jen. 99. Buxb. I 63. ***Hypericum feu Andrifermum Afcy-.  
.rum dictum, caule quadrangulo glabro.*** Hist. Oxon. 2. 47 I.  
SAINT PETER’S WORT. .

It grows in watery Places, and flowers in ***July*** and ***August:***The Heth, the Flowers, and the Seed, are in Use; the Herb  
and Flowers having the -same Virtues as ***Hiypericum,*** or ***St:  
.Jolnds Wort.*** The Seed is useful in the Sciatica, and purges  
.bilious Humours by Stool. ***Dale.***

ASCYRUM, otherwise called ***Aseyrdides,*** and ***Androfamum,***is a Species of ***Hypcricum,*** but of a different Bigness, having  
larger Branches, and heing more shrubby, or fuller os Shoots,  
with fine scarlet Leaves. It bears a purple Flower, and a Seed  
like that ***of Hypericum,*** which smells like Rosin, and stains the  
Fingers of those who handle it with a bloody Colour, whence  
it took the Name of ***Androscemum.***

The Seeds drank ***(to the quantity of two Drams, according se***Pliny) in a Pint os Hydromel, is good sor the Sciatica, for it  
purges Bile plentifully; but the Dose oughtto be continued till

Among other antient Authors, who wrote on the Composition  
of Medicines, there were two called ***Asclepiades***; but both dif-  
ferent from the ***Asclepiades*** above-mentioned;. for they are both  
quoted by ***Galen***; and that Author observes, that they both  
lived aster ***Andrornachus,*** who was Physician to ***Nero.***

The ***Asclepiades*** most frequentiy quoted by ***Galen,*** and whom  
he ordinarily calls by the single Name os ***Asclepiades,*** was more  
particularly distinguished by the Surname of ***Pharmacion, as  
Galen*** informs us; and this Surname denoted the Principal  
Business os this Physician, which was the Composition of Me-  
dicines, by the ***Greeks*** called ***Pharrnaca.***

This ***Asclepiades,*** whom the learned Mr. DI ***Capoa*** confounds  
with .the first-mentioned ***Asclepiades,*** wrote ten Books, five  
Upon Medicines to be used externally; and five other upon  
«such as were to be used internally. ***Galen*** says, he wrote very  
well,, and ranks him among the best Authors who had handled  
That Subject. He even praises him in a particular manner, for  
**his** Exactness in describing the ***Modus Faciendi,*** ortho precise  
Method one ought to take in making the Compositions he de-  
scribed. He also commends him sor his Exactness in. deter-  
mining the Qualities of these Medicines, and the particular  
Manner in which they were to be used. . The following is an  
Example Of the Exactness of ***Asclepiades,*** and of the Advan-  
tages attending it: ...  
***The* PLAISTER *of* ASCLEPIADES fer CHIRONIAN ULCERS,  
*and others of difficult Cure.***

" Take of Verdigrise, one Ounce; os Wax, half a Pound;  
" of the Resm of the Larch-tree, ***[Fenice*** TurpentineJ  
" half an Ounce. The Wax and Resin must he melted;  
" and after pounding the Verdigrise, add it to them; then  
" stir the Whole."

The way of using it is this : Spread a littie -of this Plaister  
Itpon as much Leather as will cover the Ulcer; place round it  
some Medicine for preventing Inflammation, and let your  
Plaister lie on for three Days. Then wash the Part affected  
gently ; wash also and soften the odd Plaister, and apply it again  
to the Ulcer; continue this Method every three Days till the  
Cicatrix is formed. /' ’ . .

***- Galen,*** who gives us an Account of this Method, after ap-  
proying os it, fries to account for its Success, by a certain Re-  
. lation the Plaister acquires to the Body of the Patient, by means  
suof its long Stay upon-the Ulcer. But this may he the more  
rationally accounted for in another way, which is, , that by  
rarely raifmg the Plaister, or allowing it to remain on the Ulcer  
for three Days, the Cicatrix has more Time to form itself,  
and the Flesh is more commodioufly nourished, hecause the  
Ulcer is by that means less frequently exposed to the Air, which,  
by introducing some foreign Substance into the Wound, breaks  
the Fibres which began to unite themselves, and form Flesh  
and Skin. Besides, the Motion excited. in the Ulcer, or Part  
affected, by the taking away, and again applying,, the Plaister,  
interrupts the Formation of the Cicatrix, ***by*** breaking and put-  
ting out of Order the Fibres, which, in such a Cose, are Very  
tender. In short, the renewing the Plaister,..for the same Rea-  
son, retards the Cicatrix, because a fresh Plaister, has, always  
more Force and Penetration, than one which has heen used hesore.  
There are a great many more ***Asclepiades***; but aS their Cha-  
rasters have nothing Very remarkable in them, and as the Ac-  
counts we have of them; are involved in such Obscurity and  
Perplexity, as can never he surmounted by. the greatest Industry,

' we shall say no more concerning them. ***Le Clere. \***' - ASCLEPIAS, a Plant thus distinguished:

- Ἀσλεπιἀρ, Diosc. ***Vincetoxicum Hirundinaria,*** Ossie. Chain  
Ii9. ***Asclepius sure albo.*** Get. .Emac. 898. Park. Theat.  
387. Co Β. Pin. 303. Rafi Hist 2. IO9I. Hist. Oxon. 3.  
**6iI.** Toum. Inst.. 94. Elem. Bot. 8O. Boerh. Ind. A. **3I2.  
*Asclepiusside Vincetoxicum multis, floribus albicantibus,*** J. B. 2.  
I 38. ***Apocynum Asclepius dictum.*** Par. Bat. 43. ***Vinceloxicon,***’ Rupp. Flor. Jen. 2Ο. Buxb. 336. SWALLOW-WORT.

***Dale. -***

**. ASCLEPIAS** runs up with long Shoots, on which are long  
Leaves like thofe of IVy. The Roots are numerous, flender,  
and sweet-scented; the Flower of a strong Smell, the Seed like  
that of the ***'Securidata*** (Hatchet-Vetch). It: grows in the  
Mountaim.

The Roots, drank in Wine, give Relief under the Gripes,  
and the Bites of venomous Animals. ‘ The Leaves, applied as  
a Cataplasm, aro good in malignant Diseases of the Breasts and  
Uterus. ***Diofcorides, Lip.*** 3. ***.Cap.*** I06.

The Roots of Swallow-wort are small and stringy, spreading  
Very much in the Ground, and sending up many tough Stalks,  
about ’a Foot and half, or two Foot high, hardly able to sup-  
port themselves; having at every Joint two Leaves, set opposite  
to one another, on Very short Foot-stalks, which are round at  
the Base, an inch and an half broad in the widest Part, and  
about three inches long, growing narrower and sharp-pointed ;  
’ on the Tops of the Stalks come forth finall Bunches, of five-  
leaved Star-fashion white Flowers each of which, in warm

Healthinrestored.. It is also effectual against Burnings,-if used  
ina Cataplasm. . *Dioscorides, Lib.* .3. Cop. I 72. \_...

ASDENIGL’AzroEGINL the Blood-stone, *Jsehnst so  
-ASE,* ASSE, ἄση, ssein, in *Hippocrates,* sometimes signifies  
a Loathing of -Food, or Nausea, from a Conflux of Humours  
*io* the Stomach. So in *Aph. 61. Lib. %,* ifa Woman .miss her  
Menses, and no Shiverings or Fever succeed, ασαι δ’ άήίου  
*orfoensixsaai, Ci* but a Loathing comes upon her, " she has con-  
ceived. In *Lib. J. Epid, lean* τήν καρδίαν fin, cc an Anxiety

" about the Tieart (Mouth os the Stomach).'' Ἄση is also  
very often used by the same Author to express an Anxiety with  
a Restlesness and,Jactation; and such Patients are called  
ἀσώδβς, though they he free from. a Nausea; for, as *Galen,  
Comm.* 2. *in Prorrhet.* writes, sick Persons are ἀαώδείς, on two  
Accounts; first when the Strength is so unable Io support  
the Body, that the Patient can bear to lie m no Posture ; and,  
secondly, when the Mouth Of the Stomach is Vellicated by cor-  
Iupt Humours. The former Case is Very dangerous, and the  
latter attended with a Nausea. So άσώδβς πυρετοἰ, in several  
Places of *Hippocrates,* signifies such Fevers as are attended with  
great Jactations and Anxieties. ......... ’..

ASEB, Alum. *Isiulandus, Johnson...*

ASED, *Leo. Ibidem. .... .. ’*

ASEDENIGI, the Lapis Haematitis, Bloodstone. . .

ASEF, ALBASEF, *Arabic-* Words for HYDROA, which  
she. *Blancard. δ᾽ . .. .. ... .*

. ASEGEN, Dragons-blood. *Rulanflus, johnscn.*ASELLI, the same as'MILLEPEDES, which see.  
ASELLUS; Offic.Jons. de Pise, lr. *Asellus major,* Chant.

de Fife. 2. Schons. Ichth. 38. *Asellus mayor, vulgario.* Rail  
bynop. Pifc. 53. *Asellus rrestyor uulgario,: Nelgis. Caheliau,*Ejusd. Ichth. J65. *Afellus^ Mcrluccius, Cabeliau,* Mier..pin;  
184. Gesh. de Aquat. 84. *Myoyrhua vulgaris, 's.maprima Asello,  
rum Species)* Bellon, de Pise. I IS. *Myorhua vel Malva altera,*AldroV. de Pifc. 289.' *Molua,* Rondel; .de Piso. I. 280. *Molua  
vel Morhua altera minor Rondeletii,* Gefn. de Aquat. 88,  
THE COD-FISH, or KEELING. *Dalesi ’*

. You are to chuse that which is white, tender,, fresh, and  
well tasted. \_ S S .

. It is nourishing enough, and is a tolerable good Food.

Salt Cod is not pear ststwell tasted as that which is fresh,  
neither IS it so easy of Digestion, but harder and tougher. You  
are Io steep it in Water before it in eaten; for, without that, it  
will heat much, and make you very dry. ; ... i  
. st contains much Oil and volatile Salt.

. It agrees at all times with any *susfo* and Constitutioni

RE MAR K S. \*

The Cod is a Sea Pish well known\* It is much used for  
.-Fond. When it is fresh and new, it produces good Juice;

and is nourishing, hecaufe it contains a great Quantity of oily  
and balsamic Parts; but when it has been salted, and is too  
old, it is’ not so well tasted, nor so easy of Digestion ; not  
. only hecaufe the Bay-salt hath fixed and sunk down its more

volatile Parts, and such as excite an agreeable Taste but  
also because that being introduced into the Pores of the Fish,  
it makes it more solid, compact, and hard.

The Pickle os Cod is of. a dissolving and drying Nature,  
when outwardly applied: They also use it among other things  
in Clysters; for It is laxative, because4. it Contains much  
. Salt, imitates the Intestinal Glands, and forces more Liquor  
... out os them than before. .

The Stock-fish used in *France,* and other Parts, is not so  
good as salted and dried Cod : Some pretend otherwise, and  
will have it to he the Melwel; called in *Lutin, Molua. mayor:*Be it asst will. Stock-fish is no good Fond; because it is hard,  
tough, and not easily digested: However, there are many  
.. People that make a Ragou of it.. . . : ’ δ᾽ .  
The Pickle Of Melwel has the same Virtues as that of Cedi

*Eemery on Foods. . . . \_*

/TheASELLUS MARINUS is the same as MERBANGIUS,  
which see. . . . .

ASEMOS, ἄσημος, from α Negative, find σῆμα, a \_ Sign,  
is an Epithet; applied to Events that fall out contrary to all Ap-  
pearance, and without any manifest Cause. Thus the AdVeth  
ἀσήμως, in *Hippocrates,* is expounded by ἀαρίτόσς, ἀλόγως, or  
παραλόγως. Thus, *Lib, 2. Epid, batiste- davpeiss apaatisulcu,* δύσ-  
xeda, ‘. whatever.Symptoms disappear unaccountably; or. with-  
" out. the. critical Signs, shew a bad Crisis; " and in his  
*Prorrhet.* τὰ όλἐθριμ ἀσήμως ῥαστωνήσαντα θάνατον σίνμαίνβ, " had  
" Symptoms, alleviated and mitigated for no Reason, and with-  
" out the Signs of a Crisis, signify Death;'' and again, τἀ  
ἀσίνμως ῥαστωνήσαντα φιλυπόστραφα, ce Mitigations, or Remissions,  
" without the'usual Signs which accompany a Crisis, foretel a  
" Return of the Disease," which is often quoted by *Galen,*‘ as in the Beginning of his *Lip. .reguli Reusipeaa sopriquiv,* and these  
are the most celebrated Axiomsin the whole Doctrine of Crises.  
Ασημως εφἀνη ἐπάρματα, " Tubercles appeared without Signi-  
" ficationS, " IS explained in *Galen, Comm.* 2. *in Prorrhet. by*χωρὶς σημείων, ἤτοι ἐκκρίσεως, ἢ πέψεως, " without any Signs

" either of Excretion or.Condoctinnjoand ἀσήμως ῤαστἐνήσανταὑ  
hesore-mentioned, is expounded by *Erotian,* τὰ *yplaedo lpintnpiea  
sm.lumAlum vec rb l&flscor Ensicrisicdfa.,* " Things changing *for* The  
" better, 'wrthout.any manifest Assistance or Means." , - .

Ἄσημά-πνεήμάτα, in *Lib. 6. 'Epid.* in a iinall and Icarcesp  
sensible Respiration, ‘and ἄσημα κατά ’πλἐυάὰν ἀλγὑματοί, is A  
flight and insignificant Pain ?h the Side-

Ἀ SEN EC, the Sum *Ruland. - Johns.* Ἀ

‘ ASEPH, PluinouS Alum. *Iddin. . .*

ASEPTA, ἄσίνπτα, from’α Negative,, in nd σή-πω, to pntresy.  
Unputresy'd ; but ἄσηπτα, in *Hippoc. Lw.arred* na^dur,\*^ ex-  
pounded by *Galen, Com. ad Asm.* I. *Libi L.* 4πεπτ4. uncon-  
" cocted ; " and he tells us, that it was usual with the Antients  
ἄσηπτα καλεῖν *oAAp itstas irriaslo.* λέγομεαί“'to dalr those things  
" unputresy'd, which we say are fineohcocted." .Thus, *Ltb.*3. περὶ διαίτης, ἄσηπτον δ/αχώρημα, is a crude, or impntresy'd  
Stool; ^‘σεσηπός διαχώρημα, *ibid,* is a.putresy'd or concocted  
one. And *Galen, Lib.* I. *de Loc. Affect. Cap.* 3. has the fol-  
lowing expression from *Prasiflratiis.: Tdyiyasm. frrd cr»crasm.f*καὶ πιέντα τὰ διαχωρήμενα παν/άπασιν ἄσηπτά τε καὶ *durejddurssar*" The Stones of Grapes, and Sesainum, and all other Matters  
" which pass, off .by Stool, quite unputresy'd, (uriconcocted)  
" and unchang'd.''

.. ASERON, ἀσἤρὶν,’ from ἄσῆ, 'Molestation, Uneasiness.  
Troublesome, uneasy, noxious; *Hippt Lib. de Fract. danstsit  
ysifairfpisarhv* ἰγνήην πρασβαλλομἐνον "It might createHnear  
" siness, if apply'd to the Hain,'' .speaking os a Chirurgica!  
*Cradle. Abid, w re dampirsi,* if it he hurtful,”

that is, the Bone he hurtful to the Flesh. And, *Lib. de Artics.*you have άσηράν φίρημα, " an uneasy Burden," speaking of a  
Bandage apply'd to a fractur'd Nose. In the foremention'd  
Places.άσημάν is expounded by *Erotian* ἄσης ποιήτικὸν, " causing  
" Molestation and Uneasiness.'' ' '

siASIGI. The same asASINGAR, which'see.

ASILUS, *Oestrus,. Tabanus, otcstst,,* μήωψ. An Insect with  
one Pair of Wings, which carnes its Sting in its Month, and is  
describ'd by *Aldrcraandus. Pliny CtHda-Afylus* thevFiy that-infests  
Cattie, and telis us, from the Magi, that the Worms jout of I  
which these Flies were bred; were used, before their Wings  
budded, as an Amulet against.Fevers. *Pliny., Libi* 11. *Cap.* '281  
and Lib. 3o. *Capi* II; ' ' . . --

ASIMION, ἀσίμιον? The Name of an Ingredient in My-  
*repsus. Antidot.* 465; of which .his Tranflator and Coininen-  
tator *Fuchsites* in'genuoufly confesses himself ignorant. Myst  
*repsus.,*

ASINEOS, ASINES, ἀσινέωςί μαινῆς, from α Negative, and  
σῖνος. Hurt, Mischief. Without Harin or Damage. Lib'. I.  
*letRl..Epid, y .. . . .. - „*

. ASINGAR, ASUGAR, . ASMIAR, AxiGI, Verdegrise.  
*Pulandus'....* **l ’**

ASINUS, Offic. Schrod. 5.. 269.- Mer. Pin. 166. Schw;  
Quad; 6I. Ran Synop. A; 6.3. AldroV. de Catad. 2951 Jonst  
de Quad. I2. Charlt. Exer. 4. Gefn. de Quad. I. THE  
Asset *Dale, foe - si ' \*

The ysyl is an Anitnal too well known to require a Descrip-  
tion. It has the Misfortune to he much less esteem'd in onr  
Days,, than amongst the.Antients; who paid it a very great  
Respect, as we may. infer from a great Number of Passages in  
the *Greek* Writers. -su so

.Mr. .Baxter is os Opinion, that the.*Anchealus* mention'd by .

*Martial,* as something sabred amongst the *Jeeas,* and by which  
he.insinuates that they swear, means an Ass, *Pudens Deus.*For why, says he, may it not be said ininrDN, *Anchiel,* that  
*is. Pudens Dcus,* or Ὁνόθἐος, in the - same Fostn aS TN’nN,  
*Ariel, Leoninus Daus-,* or Λεοντόθεος; We know the old Re-  
proach in *Tdrtulrtan,* DEUs CHRISTIANORUM ONodHOE-  
RITES (for so it should be read) ;; whence *Petronius:*

*a . - '* a . “

*. ‘ JuAeaus licet et porcinum Numdn adoret, . ἐν*

*Et cilli fiimmas advocet Auriculas. ' - .*

*Ppiphanius* also speaking os the *Gnostics :* Φασι τὸν [θεὸντ  
Σαβαώθ όι μἐν όνου μορφὴν ἔχβν, ὸῖ o χοίρσ " They ray, that  
" the [God] Sabacth has the Form-of an Ass; others say os a

Swine.” It appears also, from *Plutarch, in aside,* that the  
**Ass** and Swine, among the *Egyptians,* were both sacred to *Ty-  
phon* ; and even that this *Typhon* begat *Hicrosolyrnus* and *fudenas.*'Tis probable therefore, that the antient jesor spared Asses arid  
Swine out of Contradiction to the *Egyptians,* by whom they  
were siaughter’d as opposite Deities. *Baxter's Glofs.arti.eas:*

**- ’ AsrES DUNG.**

We have known; *kialsAetius,* the Juice of Asses Dting high-  
ly beneficis! in a Dysentery, especially if the Beast has been fed  
upon the Mountains, or has had an astringent Pasture, i ls rhe  
Juice be insufficient, let the Dung be moisten'd with the juice’  
of Plantain, which must afterwards he express'd and infused.  
*Aetius, Teirab.* 3. *Scrm. I. Cap.* 45.

. It is also recommendetLfor stopping Haemorrhages. '

**ASSES HOOF.**

The Hoofs of Asses calcin’d, and drank every Day, are laid  
, to cure the Epilepsy; and, mix’d and work’d with Oil, to dis-  
cuss strumous Swellings: Also ’ the Assies of the same, well-'  
beaten in Woman’s Milk, and reduced to a,Collyrium, are sup-  
posed to deterge Cicatrices in the Eyes, if rubb’d thereon, toge-  
ther with Milk. *Aetius, Tetrab.* I. *Serm.* a. *Cap.* I57.

It is also recommended for healing Chilblains, Chaps in the  
Skin, for discussing Apostemations, and for expelling the dead  
Foetus, and in Hysterical Cases.

AssEs FLESH. ‘

Next, rnserior to the Flesh of Stags, which is itself of had  
Juice, hard, and difficult of Digestion, is the Flesh of wild  
Asses; but thet of tame Asses, especially when they are old,  
tho’ eaten , by some, is of very bed Juice, difficult of Con-  
coction, quite foreign to the Stomach, and ungrateful to the  
Palate. *Oribase Med. Coll. Lib. a.. Cap.* 28.

. The Flesh of Animals which heve solid Hoofs, is most vile  
Fond; but of these the best and lightest (as they say who have  
traveled over Apia) is the Flesh of wild Asses. *Ibid. Cape*68. . .

The Blond of an Ast is sand to he sudorific ., and that of **a**young Ass to cute the Jaundice.

Asses Milk is very nourishing and abstergent, and is therefore  
esteem’d good in a Consumption, in Disorders of the Stomach,  
. Abscessas of the Kidneys, the Stone in the Bladder, and Ar-  
thritic Pains. It is esteem’d gently cathartic, and was frequently  
directed by *Hippocrates* as a Purge, in large Quantities. As a  
Topic, it makes the Gums firm, eases Arthnuc Pains, and  
2ves the Face an agreeable Whiteness, if wash’d with is. See  
Ac. \ ,

The Urine of an Asa is a powerful Remedy, as is said, in  
Disorders of the Kidneys; cures the Itch; takes away Warts,  
and callous Excrescences ; and relieves in Atrophies, and Pal-  
soys of theLimis, and Pains of the GouI. *Dale* from *Schra-  
der.*

ASJOGAM, *H M. Part. %. Tab.* 59. *Arbor Indica Foliis  
adversa, sure flavescente tetrapetale odorate. Fractu nandum  
comperes.*

. It iSA Tree of a moderate Bigness, about fifteen Feet high,  
and grows in the Kingdom of *Malabar* in the *East-Indies.*

The. express’d Juice of the Leaves, mix’d with Cumin-  
feed pulverized is said to cure the Colic; and the Powder of  
the Leaves, taken with Sugar and yellow Sanders, to amend  
and purge, the Blood. *Ray Hist. Plant..* I 7 86.

ASIRACUS, ἀσίρμκος. A Species of Locusts, call’d also  
*' Onoi,* όσοι, in *Diofcorides, Lib.r.. Cap. c,y..* See LocusTA.

ASITOI, ἀσἰτοι. from α Negative, and οττίον, Fond, are those  
who abstain from Food.. In App. 32. *Lib.* a. they are call’d  
ἀοῆεὑετες, who, in *Aph.* 8. of the same Book, are raid to he  
τροφέν μή λαμβάνορτες, " such aS receive no Aliment,” as  
ἀοττεὑειν is opposed to ἐνιοττεὑειν, which is express’d by τροφὴν  
λαμβάνείν. " to take Fond,” in the same Aphorism. This  
Is according to the usual Way of speaking among the *Greeks .,*for, as *Galen* says. *Com. ad Aph.* 8. *Lib. ϊ.* λέγ«ν φύ ἡμῖν ἔδος  
ἐστι μή λαμβάνει, μέν τροφὴν τὴς ἀνορέκτους. λαμβάνει^ 6 σὴς ἰρεγο-  
μὲνους τε καὶ τρεφομένους ἀχρι κορου. " It is usual with us to say of  
“ those who heve no Appetite, thet they receive no Alainent;  
" and of those who hunger and seed to Satiety, that they re-  
" ceive Aliment.” Hence it comes, that ἀοντοι signifies the  
same as ἀποοίτοι, " such as heve an Aversion to Foodand  
*Galen, on. Aph.* 32. *Lila 2.* expounds ἀοῆεὑντες by ἀποσιτους and  
ἀνορέκτους. And *daiji»* also means the fame as ἀποοἰτίη.

. ASITIA, *deilm.* from α Negative, and οῆίον. Aliment. See  
ANoREXIA and AposITIA. - .

ASIUS *Lapis. See* AsSIus.

ASM AGA, a mixing of certain Metais together. *Balandus.  
Johnsen.*

ASMUM, Weight. *Johnsen.*

ASODES, άσώδηςγ See As e.

. ASOPER, Soot. *Palandus.*

ASPALATHUS. *Lignum Aspalathi, et Rhodium,* Offic.  
*Rhodium Lignum,* Schrod. 4. I37. Geoff. Tracti 313. *Radix  
Phodina, Lignum Rhodinum,* Mont. Exon 7. *Aspalathus,*Ind. Med. I5. ROSE-WOOD, or RHODIUM.

*Aspalathus,* which some mil *Brastfceptrum,* is a woody Shrub  
thick set with Thorns. It grows hy *the-Danube,* and in *Nafy~  
per, Syria,* and *Rhodes.* .The Perfumers use it to thicken then  
Ointments, What is good is ponderous and reddish, or pur-  
plain, when sttiot ns the Bark, close, fweet-sccnted, [os the  
Smell of Castor, *Pliny'j* and bitterish to the Taste. There is  
another Species os it, which is white, llgneous, and has no  
Smell, and this is lest valued.

. It is of a heatrng Quality, join’d with an Astringeucy; for  
which Reason a Decoction thereof, in Wine gargariz’d, is good  
for Aphthz, and to wash spreading Ulcers, and other Im.  
purities in the *Pudenda,* and also *ihaOzana.* Mix’d in a Pes-  
sary, it expels the Foetus. The Decoction thereof drank.

stops a Looseness, and throwing up of Blond; and relieves tur..  
det Difficulty of Urine and inflations. *Diofcorides, Lib. I.‘*Cino. I9.

The *Aspalathus* grows in *Egypt and Cyprus:* It is a white  
Thom, of the Bigness of a moderate Tree, and has a Flower  
like a Rose: The Root is used in Ointments. It is of a smaller  
Growth, but equally thorny, in *Niserus* and *Rhodes.* They  
cast it allo *Erystseeptrusn, Sceptrum, Adipfathern, Dipsacon,*and *Diacheton. Pliny, Lib.* la. Cap. 24. ίσ *Lib.* 24. *Cap.*IS- . . .

The Tree which hears this Wool, is believed, by *Hierman*and others, to he a *Cytisus.* It is brought us from the *Morea,.*where it grows, being very resinous, and of a pleasant Smell,  
resembling that of Roses. The *Hallanders,* being in Quest of  
some Ships which perish’d on the Coast os *New-Holland,* in the  
thirty-third or thirty-fourth Degree of Southern Latitude,  
found on thet Coast a great Quantity of this Weed. It is also  
much esteem’d in *China,* where its Infusion in Water is believ’d  
to cure Or prevent many Diseafes. An essential Oll is got from  
it, which has so much the Smell of Rofes, as to he often substi-  
tuted for their essential Oil; but the Smell of the first Kind is  
never fo strong as that of the other. This Oil is sometimes  
used by Barbers, to make their Water smell agreeably. When  
the Antients term’d this Wood *Lignum Rhodium,* we know not  
whether they intended to express, that it grows in the Island of  
*Rhodes,* or irnelis like a Rose. *Geoffrey.*

ASPALTUM, for Asphaltum, which see. *Rulandus.  
Johnston.*

ASPARAGUS, Offic. Park, Pared. e03. Raii Hist. 1.683.  
Synop. 3. 267. Ἀσπἀραγος, Diofcorides.- *Asparagus sativus.*Ger. 953. Emac. 1II0.Mer.Ein II. *Asparagus sativas  
Q.* Β. Pin. 489. Tourn. Inst. 3oo. Elem. Bot. 249. Boerh.  
Ind. A. 2. 65. Rupp. Flor. Jen. 126. *Asparagus hortense et  
pratenses,* J. Β. 3. 725. *Asparagus jive Aspharagus,* Chab. 55O.  
*Asparagus domesticus.* Hist. Oxon. a. 3. *Asparagus vulgaris,*Merc. Bot. I, 2i. Phys. Brit. IE. SPARROW-GRASS.

The Root of *Asparagus,* corruptly call’d *Sparraw-grafs,* has  
a Head thick and spongy, shooting out, all round, long cylin-  
drical Shoots, about the Thickness of a large Goose-quill, with  
few or no Fibres. From the Roots, in the Spring, arise many  
greenish-yellow Stalks, with brittle soaly Tops, bigger or less,  
according to the Difference of their Culture, which, as the  
Summer comes, on, arise higher, and open into numerous  
Branches, cover’d with Leaves, as fine as Fend, but very  
short, and encompassing the Stalk Star-sashion., among - these  
grow small greenish fix-leaved Flowers, one of which is follow’d  
by a round Berry, green at first, and, when ripe, of a shining-  
**red** Colour, in which are hard tough Seeds.

*Asparagus* is found wild in some Parts of *England,* near **the**Sea-coast ; as in *Cornwall,* near the *Lizard-point .,* about *Bri-  
fool,* and other Places; but the best is cultivated in Gardens.

The Root is one os the five opening Roots. . - - .

The Ton of the Plant, or first Bud, is a Species of Food  
highly esteem’d by every body. *Augustus* made very much use  
of it, as *Suetonius* informs us in thet Emperor’s Life. *Erasenus*also, in his *Adagia,* telis us the fame thing. It is very grateful  
to the Stomach, especially if eaten in the Beginning of Dinner.  
It procures Appetite, and tho’ the Quantity of Nourishment it  
affords is not a great deal, ’tis still more then other Pot-herbs  
yield, especially if it is well digested, as *Galen* informs us, *Lib.  
Aliment. Cap.* 59. *If* ’tis eaten hefore Dinner, it refreshes  
and opens the Liver, Spleen, and Kidneys, puts the Body in  
an agreeable State, and excites a Discharge of the Urine, which  
it renders feud and lll-smelrd, *Rod. a Fonseca, Tom.* I. *Coascl.  
Med. p.* 599. *Carol. Rayger. in Schol, ad Oof. Mod.* 6I. It is  
of adinirable Service to those who labour under Suppressions of  
Urine, or the Gravel. It is excellent for those who are fcor-  
butio or dropsical: It augments the Seminal Secretions, **and**Ϊroves a Stimulus to Venery.- It is also of singular Efficacy in  
liforders of the Eyes, *Plin. Lib.* a. *Cap.* Io. But it is very  
hurtful to such as labour under the Gout, *Crat. Lib.* 7. *Const*2I. Tis also prejudicial to those who have weak Stomachs.  
*C. Hiofseman [Lib. 5. Insiit. Med.* CX.I2. *Sect.* I.] fays, he  
knew Instances of their being thrown up undigested next Day,  
even tho’ they had heen very well prepar’d, especially by Wo.  
men with Child. Their frequent and immoderate Use renders  
Women barren, *Ephem. Na C. Dec. 2. Ants, of App. p.* 67.  
*Cland. Deodat. Panth. Hiygiajl. L. 2. C. 22. Querc. in Dias  
Polyhist.* 5.3. *C.* 2. *Got. Moebius, Epit. Insert. Med. -L. 4.  
Pare:a. C.* 3. *dr. Fr. Paullin. Libr. Sing, de Jalapa. -L.i.  
P.* 3. *C.* 23. *et Cent.* 3. *Oof. Mede Physc* 58. The Root is  
principally in Use in the Sheps, which is of a sweet and agree-  
able Taste, and is one of the five opening Roots ; for which  
Reafon ’tis used in those Disorders which proceed from Consti-  
pation. It in a remarkable manner purges the Breast, the Li-  
ver. Spleen, and Kidneys ; and is esteem’d good for the Jaun-  
dice, Dropiy, and Consumption. *Theod. Tabernamontanus*gives us the Preparation of a Wine from the *Asparagus,* which  
performs Wonders in Cafes os the Stone in the Bladder or Kid-  
neys. See also *Gualf. Charles, de Lithiase p. t-jo.* If the

Root is put upon a Tooth that aches Violenti v,. it **rat dins** it to  
come out without Pain, according to ***Ant. idsm.ld. Cent.,*** 7;  
***Memorab.stph.*** 34. ***Schenck. Obf. Med. L.*** i. Its red Grains,  
when drysa and reduced to a Powder, Cure Dysenteries and  
Fluxes. ; i

***. Asparagus fylvestrio,*** Diosc. ***Asparagus pratensis,*** J. B. 3.  
725. Chab. 55o. ***Asparagus silvestris, tenuissimo folio,*** C.B.  
Pin. 49O. Tourn. Inst. 3oo. Elem; Bot. 24q. Boerin Ind. A.  
2. 65. Bot. Month. 3o. WILD SPARROW-GRASS.'

This only differs from the preceding by Culture. ***Dale.***

Its Root is sweetish and glutinous, like that of the common  
***Sparagus***; it gives hardly any Tincture of Red to thethlue Pa-  
per, which makes it probable, that its Salt resembles the Vitri-  
elated Tartar, dissolved in a great deal of Phlegm,, thicken'd  
with some Earth and Sulphur, by. which the Poor is an Aperi-  
fives, a little temper'd. ***Martynsp Toumefort. -1 . .***

***Asparagus petrata. Corruda,*** Offic. ***Asparaguspetraa.*** Ger.  
954. Emac. Inc. ***Asparagus petraus, sive Corruda,*** Rail  
Hist. I. 683. Hist. Oxon. 2. 3. ***Asparaguspetraus, sive Cor-  
ruda aculeata.*** Park. Theat. 454. ***Asparagus foliis acutis,*** C.  
B. Pin. Aoo. Tourn. Inst. 3oo. Elem. Bot. 24o. ***Asparagus  
spinosus Corruda dictus,*** Rupp. Flor. Jen. I26. ***Corruda,***so B. 4. 726. ***Corruda, sive Asparagus fylvestrio,*** Chab. **550.**ROCK SPARROW-GRASS, se . ..

. The young ShootS and Roots of these are used :in the same  
Intentions, as those os the ***Asparagus sctivus.***

ASPASIA, the Name of a constrictive Medicine for the  
***Pudenda muliebria.*** It consisted only of Wool, moisten'd with’  
an Infusion of unripe Galls. ***Castellus. - . '***

ASPER, a sort of small RiVer-fish sound in the ***Rhone.*** It  
takes the Name from the Roughness of the Scales and Jaws.  
It is good to eat, and is esteem'd aperitive.

. The common People inquire frequentiy for ***Oil of Afpcr*** at  
**the** Chymists, which they use, as is pretended, to catch FistL .  
It is probably Oil os Ospray which they mean ; for a Fable has,  
for time immemorial, prevail'd amongst the Vulgar, that the  
Ospray drops, as he flies on the Surface of the Water, some-  
thing into it, which allures the Fish to it, that he may take.  
them. Hence the Oil of this Bird has been esteem'd to have  
the same Effect. As there is no such thing as this Oil, the  
Chymists oblige their Customers with Oil of Box, or some  
Other fetid Oil. ’ ’ si.

ASPERA ARTERIA. See **ARTERIA,** and **PULMONES.**ASPERATA. See **ASPERUM.**

. ASPERELLA. The .same **as AsPRELLA,** which see.

. ASPERGULA ASPERUGO.' See **ASPERULA. ’**

. ASPERIFOLIUS, of ***Afper,*** rough, and ***Folium,*** a Leaf.  
***Afperifolious*** is an Epithet sor such Plants as are rough-leaved, .  
having their Leaves placed alternately, or without any certain  
Order, on their Stalks. They heve a monopetalous Flower,  
Cut or divided'into five: After every Flower there succeed  
commonly sour Seeds, such as Bugloss, Borage, Comfrey,  
Hound'S-tongue, ***etc. Millen's Dictionary.***

’ ASPERSIO, προ'σκλυσμα, ῥαντισμός, ῥαὑτις, ῥανἰς. Sprink-  
ling is a well-known Application of some medicinal Liquid,  
or pulveriz'd Matter, in a thin superficiary Way, or by  
small Portions. ***Scrib. Larg.*** N° 46. 2O7. ***et alibi.*** Hence  
such Medicines as are administer'd by way of Sprinkling, or  
Aspersion, are call'd, in ***Greek, ccuriarfoei,.*** and in ***Latin  
Aspergines. Castellus. Blancard.***

.. ASPERULA. ***Afperula odorata, As.pergula, As.perula,***Offic. ***As.perula odorata,*** S. Paul. 25. ***Afperula,*** Ger. 966.  
Emac. II24. Raii Hist. I. 483. Synop. 3. 224. ***Afpcrula aut  
Afperula odorata.*** Park. Theat. 563. ***Afperula Jeu Rubeola  
'montana odorata,*** C. B. Pin. 334. ***Afpcrula odorata flore albo,***Boerh. Ind. \*A. I49. -Hist. Oxon. 3. 33I. ***Afperulafyluatica,***Rupp. Flor. Jen- 4. ***Rubus accedens Afperula quibusdam, sive  
Hepatica stellaris, J.*** Β. 3. y 18. Chab. 548. ***Aparine latifolia  
humilior montana, T.ourn. In&. tiAn*** Elem. Bot. o 3. Buxb.23.  
***Matris.ylva Trago,*** Volck. 281. ***Hepatica stellata,*** Chom.  
5OI. WOOD-ROOF. ***Dati..***

.. The Stalks of Woodroos seldom grow above a Foot high,  
square and flender, and but littie branch'd, having seven or  
eight long green Leaves growing in a Circle at every Joint,  
broader than Clivers, hut with littie or no Roughness: The  
Flowers grow on the Tops of the Stalk, in small Umbels, of  
littie single-leaved white Flowers, cut into four Segments, of a  
fweet Smell; each of which is succeeded by two round rough-  
ish Seeds, less than those of Clivers. The Root is small, lien-  
der, and creeping in the upper Crust of the Earth. It grows in  
Woods and Copses, and flowers in ***Map.***

Woodroos is esteem'd to he a good Hepatic, and useful  
against Inflammations of the Liver, and Obstructions os the  
.Gall-bladder, and the Jaundice: .The ***Germans*** put it into  
chair Wine, as we do ***Barrage*** and ***Barnet,*** as a great Cordial,  
and Comforter of the Spirits. The green Herb, bruised, is ap-  
ply'd by some Country Folks to hot Tumors and Inflamma-  
tions, and to fresh Cuss. ***Miller's Bot. Off.***

.ASPERUM, τραχὑ,-rough, is an Epithet applsid toa Body  
of an uneven Superficies, grating to the Touch, which Proper-  
tyis call'd ***A.fpcritas., Cst As.prtiudo, ACpri/sirsci,*** Roughness. Ini  
***Scribonius Largus*** we read ***As.prum*** sor ***Asperum,*** by a Syncope,  
Fju Ido. Every rough Body is uneyep, says ***Galen y*** but, on  
the contrary, every uneven Body is not rough. Roughness or  
Asperity, according to the same Author,, is occasion'd from.  
Constriction, or too great Dryness, or froth Acrimony; . ***Gal.  
Comment, in Lib.*** I. ***Hipp. de Morb. uulg. et Lib. de Ptis.arus,  
C. S.*** -S- . - . ς.

***. Afpcrata qua levent-,*** simple Medicines smoothing Asperities  
enumerated by ***Celsius,*** are. Spodium, Ebony, Gum ***Arabic,*** the  
White of ah Egg, Gum Tragacanth. ***Celsus, Lib. 5. Cap.***13. εἴ s’ - λ so . so .

ASPHALATUS. The same as **ASpALATHUS,** which  
fee. '. ‘ . -

ASPHALEIA, ἀσφἀλεια, from α Negative, arid ῦφάλλω,  
to deceive. - Security, Firmness; and ἀσφαλάστ, sate, secure;.  
***Hippocr.*** 5. ***Aphr.*** 22. ***et sticiAph. si . . λ***

ASPHALTITIS, ἀσφαλτίτις, according to ***Archigenes,* a**kind of Trefoil with a larger Leaf, used by the ***Coronarii ;***(Garland-weavers) but ***Dioscorides*** writes, that Trefoil was  
simply so call’d, ***Gorraus. Dioscorides*** makes the Name of it -  
ἀσφάλτιον, not ἀσφαλτίτις. Lib. 3. ***Cap.*** I 23. ***Edit. Wechel.***I59S\* „ ***l et. .. . . - ’***

Ἀσφαλτίτις is also a Name given by some to the last of **the**Vertebrae of the Loins. - ***Gorreeus.***

ASPHALTOS ***id Bitumen Judaic urn,*** Offic, ***Bitumen,***Calc. Musi I 74. ***Bitumen Judaicum,*** Worm. 30. Charlt. Fossi  
sq.-Aldrov. Mus. Metall. 381. ***Bitumen nigrum crafsiun,***Eentm. 2I. ***Bitumen siudatcum Asphaltum,*** Monti Inch I2.  
JEWS PITCH. Esp ’ ’ si

The ***Asphaltum*** of ***Dioscorides,*** and ***Bitumen fudaicurn*** of the  
Shops, call'd ***Carabe*** and ***Gurnmi Funerum foe Serapion,*** and by.  
others ***Mumia,*** is a solid, brittle, ponderous.Substance, ofa red,  
blackish, or dark Colour , easily inflammable, and of a strong  
bituminous Smell, especially when warm, and fusible by Fire.  
It is found in several Pasts; but the best is that which comes  
from ***fudea,*** where it is gather'd on the ***Dead Sed,*** call'd from  
thence the Lake ***Asphaltites.*** It is probable, that a great quan-  
tity of this Bitumen rises from the Bottom of that Lake th the  
Surface of the Water. At first it is so soft. Viscid, and gluy  
tinous, that it can with Difficulty be separated from any Part  
which jt touches, but in time it grows herder than Pitch ; and,  
from the Place where it is found, it is call'd ***Carabe os Sodom y  
Carabe*** heing used often by the ***Arabians*** to denote any solid  
Bitumen, and the ***Dead Sea*** being the Lake.where ***Sodom*** stoodi  
The Names of ***Gummi Funerum*** and ***Mumia*** were given is, .he-  
cause the common People, among the ***Egyptians,*** used it in em-  
balming and preserving dead Bedies..

The true ***Bitumen 'Judaicum*** is seldom brought to he; for  
***Dioscorides*** directs us to make Choice os that which shines like  
Purple, and to reject the black Kind as being foul, and of small  
Value ; but. all that we see of that Rind is black; though even  
that, when broken in Pieces, appears, against, the Light, to be  
of a Saffron Colour; and therefore it is possible this may be the  
same Kind recommended by ***Dioscorides,*** Only boil'd to a hard  
Consistence in Brass Kettles, helore it is sent to us.

It is ***of*** a discutient, emolhent, and agglutinating Quality.  
It dissolves coagulated Blood, and promotes the Menstrual Dis-  
charge. It is an Ingredient in the ***Venice*** Treacle, and in the  
Embalming Powder of ***Ch'aras. Geoffrap. . .***

ASPHARAGU6. ’ The sasne as ASPARAGUS, hut spelt  
with a ***e*** instead of a π, according to the ***Attic*** Dialect. ***Plan-  
card.***

. ASPHENDAMNOS; SPHENDAMNOS. A Mountain  
Maple. ***Blancard.***

ASPHODELUS; , TheAsphedess; .^.. .. , ἐν

The Asphodel is a well’ known Plant, with Leaves like a  
large Leek, arid a smooth Stalk, bearing on its Top a Flower  
called' ***Anthericp.s.*** [The Transtator of ***Nicander*** makes ***Anthce  
ricos*** the Fruit, and ***Antherix*** the Stalk of the Asphodel. See  
**ANTHERicOS.i δ᾽ - - -**

The Roots are oblong, smooth, and like an Acorn, .of an  
acrimonious Taste, and heating Quality. Being drank, they  
provoke Urine and the Menses; and she Weight ofa Drain  
taken in Wine Chees Pains in the Side, Coughs, Convulsions,  
and Ruptures. The Quantity of a Dye eaten as Food sacili-  
sates Vomiting; and three Drams are ah effectual Dose for  
those who are bitten by Serpents : But a Cataplasm of the Root,  
Leaves,’ and Flowers, with Wine, must at the same time he  
apply’d to the Place. The Root boiled in Lees of Wirie'inakes  
a good Cataplasm for fouIand spreading Ulcers, and for Inflam-  
thations of the Bressts or Testicles ; to recent InflamihatipnS it  
as apply'd with Polenta. The juice os the Root mixed with old  
iweet Wine, [παλαιοῦ γλυκέος j Myrrh, and Saffron, and  
thoiled all together, makes a good Medicine to anoint the Eyes.  
The same warin by itself, or with Frankincense, ' Honey,  
Wine,, and Mvrrh, is oroner for ourulentEars, and cures the

Tain ofthe Teeth, if dropped into the opposite Ear. The Ashes  
of the burnt Root rubbed on an Alopecia cause new Hain to  
spring. Oil helled in the Roots hollowed, and set over the  
Fisc is good to anoint exulcerated Chilblains, and Ambustions j  
and dropped into the Ears it eases the Pains therein. The Root  
absterges the white AlphuS, [αλφὸν λευκὸντ if the Part assectsd  
be first rubbed with a Linen Cloth, and then anointed. The  
Seed and Flowers drank in Wine are a most esseolual Antidote  
against.the-Scolopendra and Scorpion, but disturb the Belly.  
*Diofcorides, Lib.* 2: *.Cap.* I99. .

This Asphodel does nor seem to be the fame as thet taken  
Notice of by *Hiestod,* which he reprofents as eatable, by way of  
Food, and joins it with the Mallows.

*Asphodelus verus albus,* Offic. Ἀσφοδελος, ' Dioscorides,  
*Asphodelus ramosus,*Ger. \*86. *(secura est transpasttasiscmzc.* 93.  
*Asphodelus .albus ramosus mas, C.* B. Pin. 28. Tourn. Init.  
343. Elem. Bot. 286. Boerhi Ind. A. 2..II0. *Asphodelus  
major albus ramofus.* Park. Parad. I46. *Asphodelus majcr  
rarnofus store, albo,* J. B. a. 625. Chab: 22I. Raii Hist. 2.  
ΙΤ9τ. *Assedelus albus ramosus.* Hist. Oxon. 2. 330. WHITE.

- The Stalks of the white Asphodel grow to be two or three  
Feet high, branched toward the Top, divided into several  
Spikes of starry white Flowers, each being monopetalous,  
divided into five Parts, with a purple Line on the Back of each,  
arid several yellow Chives in the Middle. The Leaves are long  
and narrow, and sharp-pointed, hollow’d in the Middle like  
a'Sword-Hade. The Root is composed of a great many long,  
roundish, tuberous Glandules, growing from a stringy Head.  
It is planted with us in Gardens, its native Place being *Italy,  
Spain,"* and the Southern Parts of *France,* and flowers in  
*May. ... ... . ...*

The Roots of this Plant were used by the Antients to pro-  
voke Urine, and bring down the Menses ;. but it is very rarely  
. met with in the Practice of Physic. *Miller's Bot. Oof.*

*- Asphodelus verus luteus, hasta regia,* Offic. *Asphodelus  
luteus.* Ger. 87. Emac. 94. j. B. 2. 632. Chain 22I. Raii  
Hist. 2. I192. *Asphodelus luteus, et stsrr, et radice,* C. B.  
Pin. 28. Rupp: FloI. Jen. I24. Tourn. Inst. 344. Boerhi Ind.  
A..2. no. *Asphodelus luteus minor five Hastula regia*, Park.  
Paced. I47: *Asphodelus folio fistulose striata, non ramosus,  
liiteus, et store, et radices* Hist. Oxon. a. *aai.* KINGS  
SPEAR. Illon:

, - This is a lower Plant than the former, and much less  
branch’d: The Leaves are long, hollow, and sistular, some-  
what triangular ; the Leaves grow in Spikes ofa yellow Colour,  
larger than the other, of the same Shape and Make. The Root  
is composed of the like Clogs and Glandules, of a yellow Co-  
lour. This likewise is a Native of Ztasc.and *Sicily,* and is  
planted here in Gardens,, flowering in *May* and *June.*

The fame Virtues are attributed to this, as to the former,  
het it is seldom used. *Miller's Bat. Off.*

*Bartholomaus Torn* is more particular with respeol to this  
Plant; for which Reason I shall give his Chapter upon in  
*. Asphodelus, Affndilus et Hastula regia. Asphodelus luteus,*Dod. J. Β. Chabr. *Listens et store et radice,* C. B. *Lineus  
minor sute Hastula regia.* Park. *Folio scstulose striate, non ramo-  
sas.. Liiteus et surf et ' radice,* Moris. H. 2. *Iplaon* The-  
ophrasti, Ασφοδελος, Grsec. *Eriaambac,* Arab. *Bernhardi Testi-  
culus.* Others call it *Anthericum,* which,„ according to the  
Fiction of *Lucian,* the Ghosts of the Damn’d eat in Hell. It  
is an Herb well enough known in our Gardens, on account  
of its beautiful Flowers. It grows naturally in many Parts of  
*Italy, France,* and *Spain.* " The Poet *Hesiod* makes very ho-  
nourable mention of in There, are three Sorts of it,, two of  
which are white and prickly on the Edges, but the other Spe:.  
cies is of a yellow Colour. The Root is principally used, which  
is het, and of a strong bitter Taste. *Fallopius, L. de Causer.  
C. io.* reckons it among. the best of the milder Catheretics. . It  
is of a wanning, drying, opening, distrusting, purgative, and  
cleansing Nature. It also excites a. Discharge os the Urine and  
Menfes; is good for Spasms, cures Ruptures, Jaundice, and  
the. Drop sir. . A Decodtion of the, Roots, of Asphodel, used as  
common Drink, is a powerful Medicine. *Gull. Varirn. Secret.  
Mede p. m.* I3I.X The Root boiled: in Wine or Water, and  
sufficiently triturated'when dry, cleanses and cutes old corrosive  
and fetid Wounds and Ulcers, Swellings of the Breasts and  
Privy-parts; .as also bloody Ulcers, *Plin. L. ai. C. τί.* A  
Cataplasm is also prepared of it and Pitch, sor removing the  
Stench of the Feet, *P. Laurents. Harticult. L.* 2. *C. y.p.* I I4.  
If beat, and laid upon fcrophulous Swellings, it cures them.  
*Forest, L.* 3. *Obsc Chir.* II. and heals’Chilblains, whether ex-  
ulcerated or not, *fo Praevot. in Made Paupe Jah. Scultet. in  
Armament. Chir. Obsc.* 83. The Vinegar in which the Root  
has been helled, ’if used tor washing the Body, cures the Itch,  
mid other scorbutic Eruptions. Some roast the Root in hot  
Ashes, and rub their Faces and Hands with it,- in- order to  
remove all Blotches,’ and purify 'the Skin. The Root'also  
causes the Hair to grow fast, and curlr See *Laurenberg. Appa-  
rar. Plantar. L. i. C.* 7. The Root burnt to Ashes, and

mixed with Honey, makes the Hair grow again on those Parts  
from which it is fallen ossi -This Root reduced to Powder,  
and mixed with calcined Alum, corrodes the proud Flesh of  
soul Ulcers, if apply’d to them. If a House is sinoaked with  
this Root, it banishes Mice,, and proves a Poison to them. If  
its Root is put into the Water which Swine drink, it prevents  
their being affectsd with a pestilential Leprosy; or is they are  
so, -it restores them to their natural State. It alfo produces the  
same Effecti if they are frequently washed with Inch a Water.  
*Florentinus.*

ASPHYXIA, ἀσφυξία, from α Negative, and σφὑξιστ, a  
Pulse, from σφὑζων to leap, or beat like an Artery. A Pri-  
vation of the Pulse, when no Artery seems to be moved, or no  
Monon is perceptible to the Touch. A total Privation of the  
Pulse indeed cannot be while the Animal is alive- but with'  
respect to our Sense of Feeing, a Privation often happens,  
*Galen. Lib.* I. *de Pracogn. ex Pulst* The same is occasioned  
two Ways, which are either a total Abolition of the Pulse of the  
Arteries, which is the most mortal of all Symptoms, orhecaufe  
it heats so weakly and remissly, as to escape all Norice by the  
Touch. *Galen. Lib.* 2. *de Praesag. ex pulse*

Ἀσφυξία is rendered by *Caelius Aurelianus, Cap.* 3. *Lib.* 4.  
*Tard. Passe. Pulsas Parvitas et.Amputatio,* "a Smallness and  
" Amputation of the Pulse."

\*Ασφυκτοι, in *Galen, Lib. 4. de Diff. Pulse Cap.* 3. are such  
as are deprived of Pulse, or have no perceptible Motion of their  
Arteries. -

ASPIC. . . - -

There is an Oil, called by the *French Oil of Aspic,* drawh  
from a Plant which *C. Bauhine* calls *Lavenduia latifolia*; het  
to which *J. Bauhine* gives the Name of *Pseudenardus,* and the  
*French* thet os *Aspic. ' . ' .*

This Plant is commonly sound in all Parts of *Provence;*and when it produces its Flowers, we put them, when almost  
dry, into a large Still, with a great deal of Water. After  
a Maceration for some Days, we distil the Whole, Upon which  
there is carried along with the Water an Oll of a yellowish or  
amber Colour; and this is the *Oil of Aspic,* pure and unadulte-  
rated, as it ought to be. The Flowers of this Plant are to he  
chosen for this Purpose, rather than any other of its Parts,  
because they contain the largest Quantity of essential Oil; and  
indced, upon strict Observation,, we find, that the Cup ofthe  
Flower contains almost all the oily Parts of the Plant.

We must here observe, that aromatic Plants generally yield  
but a’ finall Quantity of Oll; so that before rhe Oil can-he  
distilled with fmall Expence, a large Quantity of the Flowers  
must be easily procured , which is the Reason thet in *Provence*the essential *Oil of Aspic* is not only to he found in greater  
Abundance, but is also fold cheaper, than the Oil extracted from  
that Piant in most other Parts. ' . ' '

But notwithstanding the Easiness of extracting the Oil in  
thefe Parts, where the Flowers are found in Abundance, yet  
the immense Quantity of it ofed, and thedow Price paid for it,  
shew that we very rarely have it perfectiy pure and unadul-  
terated. There are several ways of adulterating this Oil, two  
of the least fraudulent of which I myself heve discovered ; one is  
by mixing it with Spirits of Wine, and the other by adding to  
it Oil of Turpentine. This Oil is sorthe most part imported  
to us from *Provence* and *Montpelier ;* but as ’tis a great deal  
more employed in Painting, Enameling, and Varnishing, than  
in Physic, it does not so properly come under our present Con-  
sideration, *Mem. de st Acad.* I7I5. hy *Mr. Geofscroy the younger:',*

ASPIDION, ιόσπίδιον. a Diminutive of ἀσπιστ, a-Buckler.-  
Α Name for the *Alyssen ofDiofcorides,* because it has small  
round Pods refembling a Buckler. *Blaneard. . ,*

ASPIDISCOS, ἀσπίδισκος. frommiii, a Buckler, properly  
signifies a llttle Buckler, of the exterior Ornaments of Bucklers ;  
but is apply’d by Metaphor to the Sphinctsr Muscle, as. being  
.in a manner the Ring of the Anns, as we are informed by  
*Caelius Aurelianus, Tand. Passe Liar %. Cape.* 3: . -

ASPIS, ἀσπἱς. . The Asp, a very poisonous Serpent, of  
which *Galen, Lib.* I. *de Theriac. ad risen.' C.* 8. makes three  
Species, the first called χερσαῖα, the second χελιδονία, and the  
last πίυάς, which is the most pernicious 4 for it extends its  
Neck, and -suddenly spits its Venom upon a Person, as if in  
were endued with Reason to estimate the Distance. This is the  
Sort that is supposed to have hit Queen *Cleopatra* to Death ; sor  
aster the Overthrow and Death of *Antony,* when *Augustus* had  
a Design to lead her away . captive, to adorn his Triumph, she  
held out her Breast to one of these Serpents, and by its Site  
received a very speedy Death. The Mark of this Bite is very  
finall, like the Pundture of a Needle, without/a Tumor, and  
but a small Quantity of Blond, though black in Colour, distils  
from the Wound. This is foon fucceeded-by a Dimness of  
Sight, and various Kinds of Pain in the Eody, hut very stighs,  
and not without fome Mixture of Pleasure.-. Wherefore AT-  
*cander* had Reason to sey,‘in .his Verses, thet It kills without  
Pain. The Colour-changes to a Green and Herbaceous; there  
is a flight Gnawing at the Mouth of the Stomach ; the Fore-  
head has continual Spasins; the Eye-lids move involuntarily, as

**at the Approach ofSleep;- and the Patient dies in less than the\***third Part of a Day. ...... .

\* The most ready and effectual Remedy is Amputation of the  
affected Part, if it he one Of the Extremities, and may he done;  
if not, let the circumjacent Flesh be speedily scarify'd, and-cut  
away even to the Bone, -that the-Venom may not spread itself  
into the neighbouring Parts, and the rest are to he treated with  
Cauteries; for the Poison of this Serpent, as well as that of the  
Bafiiish, like Bulls Blood, Very soon congeals the Blond and  
Spirits in the Arteries. ***P. AEginet: Lib.*** 5i ***Cap.*** 18.

***’ Eiaplastrum ex Aspidibus.*** A Plaister of Asps for stnimous  
Swellings, and other Hardnesses, and for the Gout-in the In-  
tervals of the Paroxysms, you are taught how to prepare by  
***Artius, Tetrab. 4. Serm.*** 3i ***Cap. ye,. - " ’ -***

’ It is probable, that anointing the injured Part with\* CommoIT  
Oil of Olives by a-warm Fire, would cure the Bite of the Asp,'  
as it does that of the Viper. - See ALEIPHA, and ViPE'RA'. ;

\* ASPLENIUM, a Plant thus distinguish'd : ' . "

***' Afplenium Cotcrach, Scolependrias*** Offic. ***Afplenium,' Scalar  
scandium, Cotcrach,*** Chain 556. ***'Afpleniumsive Ceterach,*** J.B.  
3. 749. Get. 978. Emac. II40.’ Rail Hist. I. I39. Synop. 45.'  
Park. 1O46. Hist. Oxon. I. 56I. Elem. Bot. 434. Tourn.  
Inst.- '544. - ***Cotcrach officinarum, ~*** C. Β. 354. SPLEEN-  
WORT or MILTWAST:- ***Dale. \* - -- --***

"‘This is a small Plant, consisting only of Leaves, which spring'  
from a fibrous Root. - They are about three or sour inches long,  
hardly half fin Inch broad, cut into small roundish Segments,  
which stand not opposite to one another, but alternately j they  
are of a greenish Colour On the upper Side, and brownish,  
and full of dusty Seed underneath, generally crumpled, or folded  
inward, in Shape somewhat likeine Insect ***Scolopondra,***whence  
it takes one of the Names.' It grows upon old Stone'Walls and'  
Buildings, especially in the West of ***England. « ;***

' This is one of the five Capillary Plants, having its’Name  
from its good Effects in curing Diseases of the Spleen, taking  
away' the Swellings thereof, and hindering its too great Large-  
ness, whence likewise it is called Miltwast'; it also opens Ob-  
structions of the Liver, helps the Jaundice, 'and is very good for  
the Rickets in Children. ***MillgulsPot. Off.***

***- Vitruvius*** gives an extraordinary Instance of the Effects of  
Afplenium. in ***Crete,*** which is specify'd in the'Extractssom that  
Author under the Article AER. r'so' s " '

- “ ASPREDO ***Cornua,*** Offic. Bellon, de Aquat. ***atiis Cernua  
fluviatilis,*** Gefn. de Aquat. I92. Charlt. Pise. 39. Ran Ichth.  
334. - Ejufd. Synop; Pisc. 144. Met. Pin. I9O-; ***As.predo,***Cains de Ran-Animal I O7; ***Auratir,*** Rondel. de Pisc. I. I I5.  
***Perea fluviatilis minor,*** Aldrovsede Pisc. 624. Jons de Pisc.  
yossi -THE RUFF. \ - - ’sq; ; : ss Essa si . ' "  
''This Fish is common in many of our large Rivers. ***Ges.ner***recommends a Bone found in the‘‘Head.of this Fish, soy the  
Stone in the Kidneys , find' for pungent. Pains about the Rihs,  
and in other Parts. ***Dale. . ;-***

' ASPRELLAY A Name which ***Plancard*** gives to the ***Equi-  
setum majus,-*** on account os its-***Asperity , for*** which it jo used to  
polish Chests and Cupboards. z ’ ' " ; " ‘

ASPRIS. -Ἀ Tree, the same as the AEGiLeTs.' wh'ich see.

ASSA-FCETIDA. \* The same as ASA-FCETIDA. See

**SILPHIUM. / " ‘ " - ' . '** *s :*

-ASSALA. \ANutmeg.-- ***Resland. - Johnson. ' si***

’ ASSALLEsi Worms that breed among Planks, otherwise  
called ***Cossi, Toredones, Termes,.Thripesgi Xylophagil Rulandus.***

ASSANEGI; ASANIRGI, ASARAGL ;The Powder  
that falls off from che 'Walis of Sait; in the Salt Mines. . ***Ru-  
landus. ,. ' ss ‘***

Λ ASSANUS. A Weight among the\* Antients, consisting of  
two Drams. ***Galen, de Ponderibus at Mensi. . :*** Ἀ.

C'ASSATIO, οὸιτησις, Aflation, is. an artificial way of dressings  
Eatables, by means ofan extrinfiro and foreign Hear, which by  
Its prevailing Force is . effectual towards drying of the same.  
There are sevesal/Kinds or Modes of Assation ; sor either the  
Meat is moved near the Fine, or- placed in a Vessel, with none,  
or hufran insufficien t Quantity of Moisture, and Fire put tinder  
its To this Clari belong fry'd- Meats, whence Frying is. A  
Species of Aflation.. Hither also may-we refer ***To silo, hehrswrts.***Toasting. -’Roasted: arid fry’d Meate, according ***to Galen,  
Lib. %. Alim. Fdc. Cap.*** 2. .'assess drier Aliment Io the Body.  
The first in ***GreelcAia*** called οἄ'τὰἵ the other τηγαρίστά.\* ***Scri-  
bonius .Largus*** mentions ***Ova ajsia,*** NS 22I.- ***Assearesiffi*** the  
Spagirical -Language,in io dry a ’Thing, and put it in fuch a  
State, as to be: reducible to Powderjo and sometimes if is the  
same as to. congeal. What IS ail red-hot both within and with-  
out, undergoes awrong Assations ***:Asseare,*** by way of Allegory,  
is called the seventh Regimen; which is that or the Moon,  
whose Office It in to heat andcompose for the Space of twenty-  
five-Days, and-thuras called1 the' Silver Regimen.si Lastly,  
Assation, in the-Magistery of the Philosophers Stone, is a  
Iweet and gentleDeficcation of Bodies dtflolved-and separated  
from them Menstruums by a small Fine decreasing towards the  
End, which sweet Desiccation is a Calcination, ***Castellus.***

- -ASSATURA is the Animal or Piece of Meat but just re-  
moved from the Fine after Assation, and wrapped in a Cloths  
They are called ***Asseaturee suffocates,*** by ***Santes Ardoyrius,*** and  
reckon’d among Poisons. ***Castellusi - ' -***

\* ASSERAC, **the** same as ***Ajsis, is*** a Species of ***Eangue,***which is the ***Asses*** of the ***Egyptians,*** and differs from the Opi-  
um and Maflac of the ***Turks. Castellus ’. l***

ASSERVATIO, or CONSERVATIO, in Pharffiaceutics,  
is repositing such Collections of Simples as are necessary for Use  
in proper Vessels and Places, that they may he always in Rea-,  
diness. ***Castellus.***

" ASSIDENS ***Signum, awifoguliaL.*** an assident Sign,for Sym-  
ptom, that is, such a one as usually accompanies a Disease.- **It’**differs,-however, from the ***Pathognomonic*** in this, that this last is  
inseparable from the Distemper, as being essential to it; but  
the other not so, ***Gal. 4. in*** 3. ***Epid. C.*** 34. For Illustration;  
let the Pleurisy - be an Example, in which an acute Fever, ***i***Difficulty os Respiration, Cough, and pungent Pain of the  
Side, are pathognomonic Symptoms; but that the Pain should  
extend to the Hypochondrium, or Clavicle, or that the Patient  
should find more Ease in lying upon the affected Side  
than upon the other, are no more than ***assident*** Symptoms.  
***Castellus.' . ;. . ‘\****

***c*** ASSIDUUS is ufed by some instead of ***continuus,*** inns with -  
them ***assidua Febris*** is the fame as ***continua Febris,*** and is op-  
posed to ***dntcrmittens. Castellus. - - .... . .***

"'ASSIMILATIO, εξομοίωσις, ὸμαἰωσις, an Assimilation. It  
is the Action by which the Supply of Nourishment is alter'd  
and assimilated to the Part nourished, ***Galen.*** 3. ***de Fact Nat:  
Cap.*** I. Tn order to this there must he first an ***Appositio,***arquiareasc, an Apposition ; and then an ***Aggltttinatio, as Ad-  
haerentia, xsm.quiaei,*** an Agglutination, or Adhesion, ***Lib.*** I;  
***de F. Ns C.*** II. Tt disters only in Name from Nutrition,  
***Libsso de Caus. Syrapp. C. Ί. . : '***

- '.ASSIS is either the same with Opium; or Meconium; or  
else ttsu a Powder prepared os Hemp-leaves, os which, being  
mixed with Water, the ***Egyptians*** take five or more Boluses of  
the Bigness of a Chesnut, which throws them into a drunken  
Ecstasy for an Hour, during which they delight themselves with  
imaginary Scenes. ***Pros.p. Alpinus de Medic. AEgypt. Lib.*** 4.

***Cap.*** 2. The ***TUrhstiffiO*** eall it ***AJserarti*** See BANQUE." - '

: ASSISTENTES, ***GsAstites glandulosi.*** The same **as PA-  
RAST AT AE, winch** see. . "si

AsSITRA. A Tree in the ***Past-indies,*** the same aS  
MANDARU, which see. ***Raii Hist. Plant. sISi.***

ASSIUS LAPIS, ἼΑανίος λάθος, Diosc.

i ***Lapis Asius,*** Offic. Matth. 1386. Aldrov. Musi Metalh  
692. ***Asius vel Assius Lapis, quem etiam Sarcophagum giocant.***Worm. Ao.Charlt. Fossi 2I.- ***Sarcophagus, sive Assius Lapis,  
De*** Lacti i33. ***Sarcophagus, et Asius seu Afsius Lapis,*** Boet.  
403. ASSIAN STONER, ***Dales -***

This is so called from''***Nasos,*** a City os ***Troas*** in the Lesser  
***Asia,*** where it was sound. The ***Assian*** Stone is of a tophous,  
soft, friable, and loose Substance. Something grows upon it  
like very fine Meal, such as we see sticking upon the Walls os  
Mills. They call it the ***Flower of- the Asian Rock :*** It is of  
subfile' Parts, and consumes Flush thet is too soft and fluid by  
CoHiquation without Mordacity. The Stone on which it  
grows has the same Virtue, but weaker ; for the Flower is not  
only colliquative, digestive, and preservative like Salt, but per?  
forms all this without any remarkably corrosive Quality. It  
has somewhat of Saltness to the Taste, which makes’ it con-  
jectur’d to be a Dew arising from the Sea; which is condensed  
by the Rock,- and ‘ drylol by the Sun.; ***Galen de Simp. Med.***

***'fac: -Lisi.’g. - \* . .***

j - The ***Asian*** Stone, says ***Dioscorides,*** ought to be of the Col.  
lour of the Pumice-stone, spongy, and light, and alfo friable,-  
with intercurrent yellow Veins from the Top to the Bottom;  
Its Flower is a yellowish and saltish Substance, on the Surface  
of the Stone,- ***of***-a chin Contexture, some white; some of the  
Colour Of the Pumite-stone; inclining to yellow ; it tastes  
somewhat hiring upon' the Tongue.

'Poth the Stone and the Flower have an astringent and gently  
colliquative Virtue, and, being mixed with Resin of Turpena  
tine or Tar; discuss Tubercles ; but the Flower is esteem'd  
most effectual, and is. Indeed, when dry'd; an extraordinary  
Remedy for inveterate Ulcers, which are difficult to be cica-  
trized, and represses carnous Excrescences. Mixed with Hqui  
hey it absterges foul and virulent Ulcers ; it deterges also and  
incarns Ulcers which are hollow, and mixed with Cerate  
.restrains the spreading Kind. It is made into a Cataplasm with  
Bean-meal for the Goutjuand for splenetic Disorders with  
-Vinegar and Qtiick-lime. The Flower made into an Eclegma  
withHoney is good in a Phthisis. ..Vessels are made of the  
Stone, in which gouty Persons put their Feet when they baths,  
- 'and-find Relief thereby. Coffins are made os the'same, for the

speedy Con sumption -of dead Bedies ; and Persons of a very-  
fleshy and gross Habit are extenuated by sprinkling the Flower  
instead of Nitre in them BathS. Is any one thinks fit to wash

the Stone or Flower, he must do it as he washes *Cadrtia. Di- '  
oscorides. Lib.* **5.** *Cap.* **I42.**

About *Aesses,* a City of *Troas,* grows a Stone which consumes  
all Bodies ; they call it *Sarcophagus* [from σὰρξ, Flesh, and  
φάγω, to devour]. *Pliny, Lib.* 2. *Cap.* 96. Dead Bodies in-  
terr'd intt are found to be consum'd within forty Days, Bones.  
and all, except the Teeth. *Idem, Lib.* 36. *Cap.* I7.

ASSOS, Alum. *Rulandus.*

ASSUETUDO, the fame as **CONSUETUDO.**

\_ ASSUMTIO, Ηρόσλίΐψις, πρασφορα.ἐν a Reception. The  
Word is apply’d to every thing, whether Aliment or Medicine,  
winch is communicated by the Mouth to the Body, not except-  
ing Air itself. *Castellus.*

ASTACUS, Offic. Gesn. de Aquat. 9It Rondel, de Aquat.  
I . 5 38. *sustacus verus,* AldroV. Exang. I I 2. *Astacus mari-  
nus communis,* Jons. Exang. I3. *Astacusmarinus,* Mer. Pin.  
io I. Charlt. Exer. 55. Schonef. Ichth. 23. THE LOB-  
STERss *Dale.*

This Fish is too well known to require a Description. The  
Shell calcin'd, and drank in Wine, is said to break and carry off  
stony Concretions in the Kidneys ; and it is likely enough to  
have some Effect in such Cases, hecause the Shelis of Fish cal-  
ciffd are a sort os Lime, and the Salts Us Lime are the grand  
Dissolvents *of* stony Concretions. It is now well known,  
that whatever good Effects Mrs. *Stevens’s* Medicine for the  
Stone may have, are owing to the Salts of Lime.

.. . - Lobsters aS a Food are highly alcalefcent, and of consequence  
must he very proper Food, when an acid Acrimony prevaiis in  
the Stomach, and general Habit; but the contrary in case of  
a Tendency to an alcaline Putrefaction. They are esteem'd  
very nourishing, and good in a Consumption. See ALI-  
MENTA. - .

**ASTACUS FLUVIATILIS,** *Offise.* Rondel, de Pisc. 2.  
2Io. Schones. Ichth. 2o. Gesn. Aquat. I04. Mer. Pin. I92.  
Charlt. Exer. 56. AldroV. de Exang. I29. Jons Exang. I5.  
*Cammarus,* Bellon, de Pisc. 355. *Cancer,* Schrod. 5. 325.  
The CRAFISH, or CREVIS.

They are found in Rivers, and the Parts of them ufed in  
Pharmacy are, the *Flesch,* and what we call the *Lapilli,* or  
*Oculi Cancrorum,* known by the Name of *Crab's-eyes.* In  
their Head, according to some, or rather in their Stomach,  
are sound two white Stones, as large as a Pea, of a kind of  
lenticular or orbicular Form, but compress'd, and somewhat  
hollow on one Side, whereas, the other is convex, and dispos'd  
in *Lamina.* These Stones are of an earthy Taste. We fre-  
quently meet with a counterfeit Species of this Commodity  
prepar'd of a whitish earth, and made up in the same Form ;  
but this fictitious Kind is easily distinguished by breaking them,  
since they want those *Lamina* which are always found in the  
convex Part os natural and genuine Crabs-eyes. ’ The Flesh  
of this Animal is cooling, moistening, and adapted to nourish  
such as labour under Atrophies. The *Stones* or *Eyes* are cool-  
ing, drying, abstergent, and discutient; they resolve tartarous  
Concretions, and coagulated Blood, and are possess'd of a lithon-  
triptic Quality ; sor which Reason they are often prescrib'd in  
nephritic Pains, Pleurisies, Asthmas, and Colics; they are also  
proper for cleansing the Teeth. The Shell is possess’d of the  
same Virtues with the Stones, and is besides of Service in  
curing such Itches in Children aS arise from saline Humours,  
and in carrying off the Paroxysms of intermittentFevers. *Schrod.*. ASTAPHIS, άσταφἰς, in the *Attic* Dialect, for σταφίς, a Raisin.

ASTARZOF. The Name of an Ointment in *Paracel-  
sus,* consisting of one Ounce of Litharge wash'd, one Ounce  
and a half of ssperniola, with three Ounces each of the Juices  
of House-Ieek, and Water-lily. He gives also the same Name  
to a Mixture of.two Ounces of Rose-water with an Ounce of  
Cam phire. These he uses in the Cure of a *Formica. Paracels,  
de Apostem. Cap. leS.*

ASTCHACHiLOS is a-Name given by *Paracelsus* to a  
malignant gangrenous Ulcer, which begins at the Junctures  
-of the Feet, and ascends up the Legs to the Knees. When  
there is a Redness, he says, above the Junctures at the Root  
of the Heel, and the Ulceration occupies a large Surface,  
making its way by many little Ulcers up the Leg towards the  
Knee, you may Venture to fay there will be an *Astchachilos,*which I also call *Ararausi Id. ibid. Cap.* I8. Ἄ

ASTEION, ἀστεῖον, from ἄστυ, a City, in the fame Sense  
aS *Urbanus* comes from *Urbs.* Good, laudable, civil; polite.  
In *Hippoc. Lib. de Alim. datiOV* is opposed to Βλαβερὶν, hurtful;  
and soon aster to φλαῦραν, bad, corrupt. In *Hipp. Epist. ad  
Democ. 'ucci zM.iCoeaasse,* ἀστεῖβι τὰ *adurdlct* are such as enjoy  
a good State of Body. Ἀστεῖον, in the same Author, signifies  
civil, polite, laudable, and is commonly oppos'd to ἄγριον, rude,  
barbarous, malignant. Ἀστεῖον, according to *Farinus,* signifies  
τὸ χαρίεν,καὶ τὸ δεξιὸν, καὶ .θαύματος ἄξιον, θαυμἀσιβν, σπκδἀῖον  
καὶ ἀιδέσιμον, " graceful and handsome, worthy of Admira-  
to tion, honourable, just, and Venerable. "

ASTERES THALATTH,avher.f .θαλἄἠῖιοι,^^θάλμαα,  
or θάλαἠῖα, the Sea, Star-fish) are prescribed, together with  
Cabbage and scented Wine, by *Hippocrates, Lib.* 2. *artgi*

**γυναικ. sh the Hysteric Passion ; and sor Hysterical Pains,** *Lisi,  
arccii ytinoja. quits.*

The *Stella Marina* is very small in Bulk; its Inside is Flesh,  
but its Outside a pretty hard Callus. They say it is of fo fiery  
a Nature, that it scorches every thing it touches, and digests all  
its Food in an Instant. *Plin. Lip.* 9. Cap. 6O.

ASTERGES, ἀστεργὴς, from α Neg. and ς’έργω, properly,  
to love with a natural Affection. Inhuman, unnatural, severe -  
*in Hippoc. afigil dAgrasv,* it signifies hard, dense,- compact, and  
is opposed Io ἀραιός, μαλθακὸς, rare, soft ; as τὸ o ἄρσεν οῦκ ἄτ  
τι προσδἐξαιτο, πυκνόν τε ἐὸν καὶ - αστεργής. " But the Male  
does not receive any [Moisture] " heing dense and compact. "

ASTER ATTICUS, Ἀστἀρ Ἀἠῖικὸς, DioseorideS *Inguinalis.  
Aster Atticus,* Offic. *sister Articus,* Ger. 392. Emac. 486.  
Rah Hist. I. 338.- *Astor Atticus luteus verus,* Park. I28.  
*Astcr luteus, foliolis ad florem rigidis,* C. B. 266. *Chrysanthe-,  
murn conyzoides, foliis circa storem rigidis.* Hist. Oxon. 3. IS.  
*Chrysanthemum Asterio fade, soliis ad storem rigidis,* Herm.  
Cat. *Astcriseus annuus foliis adstorem rigides,* El. Bot. 398.  
Tourn. Insta 497, Boerh. Ind. A. 164. Ach Reg. Par.  
An. I7IO. 382. GOLDEN STARWORT. *Dales*

The *Astcr Atticus* [by some called *Bubonium,* OribasiusJ is  
a ligneous Stalk, which has a purple or yellow Flower on its  
Top, divided round about, like that of Chamomile, with redi-  
ated Leaves like a Star. The Leaves about the Stalk are oh-  
long and hairy. z .

Made into a Cataplasm it is effectually apply’d in hotDifor-  
ders of the Stomach, Inflammations of the Eyes, Buboes, and  
falling down of the Anus. They say that the purple Part of ♦  
the Flower drank in Water cures the Quinsey, and frees Chil-  
dren from the Epilepsy ; and being apply'd while it is yet moist  
and recent, by way of Cataplasm, is proper for inflammatory  
Buboes. If the Flower, when it is dry, be cropt by the Left  
Hand of the Patient, and ty'd about the Bubo, it takes off the  
Pain. *Dioscor. Lib.* 2. *Cap. 120.*

*Astcr* by some is called *Bubonium,* because it is a present  
Remedy for a Buhe. It also relieves the *Sciatica,* being ty’d  
on the Part. *Pliny, Lib.* 27. *Cap. ζ.*

*Aster* is also the Name of a Medicine invented by *Andro.,  
rnachus,* against Distillations, and Various Sorts of Pains. *Gal.  
de Comp. Med. Sec. Loc. Lib.su Cap.* 5.

The lower Leaves of this *Astcr* are about four or five Inches  
- long, and about an inch broad at the End, which is round-  
pointed, and growing narrower towards the Root ; the Stalk .  
is downy and hairy, about a Foot and a half high, with the"  
like Leaves, but smaller, set on it without Order : Toward  
the Top it is divided into three or four Branches, at the End.  
of which grows a yellow Flower like a Marigold, but with **a**broader Tbrum, and narrower *Petala r* Close under each Flow-’  
er grow six or seven stiff roundish Leaves, in form of a Star,,  
whence it takes its Name ; the Seed is oblong, thin, and flat ;  
of a blackish Colour :\* The Root is small and fibrous, perishing  
every Year. It grows in *Italy, Spain,* and the Southern Parts  
of *France,* and also in *Greece. Mellor's Bet. Osse*

This Plant is found in the Gardens of Botanists, and flow-'  
*ers in May.* Its. Leaves are only used, which are of a Vuine-’  
rary Nature, tho' rarely prescribed in Practice. The Leaves  
and the Herb itself are of Service in preternatural Commotions  
and Heats of the Stomach, Inflammations-of the Eyes, the'  
falling down of the Fundament, and Tumors in the Groins.  
The Water distill'd from its Flowers, if drunk, is of Service .  
in QtdnseyS, and the epileptic Fits of Children. *Dale.*

There are several other Plants called by the. Name os *Aster:,,*which are Species of CoNYzA,which see.

The *Helenium,* or. *Enula „Campana,* is also call'd **ASTER.  
OMNIUM MAXIMUM.**

. ASTERIA GEMMA, Offic. *Asteria, aut Solis Gemma,*Boot. 226. The BASTARD OPAL, or STAR-GEM.  
Lin/dur ' μά si ‘sususi' scsisa ' ’ *' f sc.*

This Gem is transparent like Crystal, but of a harder Na- .  
ture. 'Tis thought to be a Species Of the *Opal,* but neither  
the one nor the other are now kept in the Shops. If carried  
about with one, 'tis thought to procure Sleep, and prevent  
frightful Dreams. *BceL -*

ASTERIAS, *daapicts, Saetas, descries doNC.olumi,* from ἀστἀρ;

A Star. The sameasAsTROITES, which see, - 'Ἀ Λ "  
‘ ASTERION. The same, according *xo frlancasm.*,as As T*P R*.hefore. \* ς.ζ' su. i ...:n ufi .A

ASTERISCUS, of *Aster, ex* Starwort,-which)t is. Very  
like, except that the Seeds are not papous, bur chanell’iL  
**YELLOW STARwORTh** )/ ,οὐρ.ς’ ι . ; 'ί , τ

The Cup of the Flower is stellated with .little Leaves,  
which are extended beyond the Petals of the Flower in Length.

This Plant having no *Engiijh* Name, I have call'd it YE-L-  
Low STARWORT, altho’ it is Very different in its Character  
from that Plant; the Seeds os this being plain,utnd for the most  
part border'd round the Edge?» having no Down adhering to  
them, and the Flowers .being surrounded with A foliaceotis  
Calyx.

There are. several Species of this Plant cultivated in. cu-  
rious Botanic Gardens; but in *England* we have but three Sorts,  
which are preserved for their Beauty.

I. *Asseri sous annuus, foliis adflorem rigidis,* Tourn. THE  
ANNUAL ASTERISCUS, WITH STIFF LEAVES  
AND FLOWERS.

2. *Asieristics annuus Lnsitanicus odoratus,* Poerh. THE  
PORTUGAL SWEET-SMELLING ANNUAL ASTE-  
RISCUS;

3. *Aflcris.cus maritimus perennis patulus,* Tourn.. THE  
MARITIME PERENNIAL DWARF ASTERISCUS.  
*Miller’s Dictionary.*

ASTERITES. A Flint Stone to strike Fine with. *Rior  
' landtis.*

ASTEROIDES. BASTARD STARWORT. '  
The Characters are;

It hath a compound radiated Flower, whose Dflk is com-  
posed os many Florets which are Hermaphrodite, and os Semi-  
florets which are Female, and rest upon the Embryos, which  
are all included in a scaly Empalement. These Embryos after-  
wards become Seed, for the most part oblong.

The Species are;

- I. *Afleroides Alpina, sulicis folio,* Tourn. Cor. BAS-  
TARD STARWORT OF THE ALPS, WITH **A**'WILLOW-LEAF.

2. *Afleroides orientalis, petasitidisfolio,store maximo,* Tourn.  
Cor. ORIENTAL BASTARD STARWORT, WITH  
A BUTTER-BUR-LEAF, AND A LARGE FLOWER.

3. *Afleroides Americana minor annua,* Vaill. LESSER  
AMERICAN BASTARD ANNUAL STARWORT  
*Miller’s Suppi.*

ASTHENES, ἀςθενἤς, from α Neg. and ίθένος. Strength.  
Weak, infirm. The Difference hetween ἀιθενῆς and ἀοθενἐων lies  
‘in this, that the former signifies one weak by Nature, and prone  
to Sickness, but the other denotes a Person actually ficin *Hip.  
Lib. eacci id),* ἐγζύτατα o τό ἀοθενέοντος ἔστιν o ἀιθενῆς, ἐστι  
q ἀιθενέςερος ο ἀςθενῶν. " The weak Person is next to the  
" sick, but the sick Person is the weaker. \*\* Ἀθενῆς is also  
apply'd to δίαιτα. *Lib.* 6. *Epid. Aph. 16. Sect.* 4. winch must  
mean, according to *Galen,* a weak or low Regimen of Diet, or  
such as renders a Person weak. By a weak Diet also may be un-  
derstood such as yields but littie Nutriment. So *Lib. 6. Epid.  
Sect.* 5. *Aph. Q-Q. rd dAesorwspst. artiet.* are such Fond as nourish  
little ; and so *Galen* explains the Place, as on the contrary  
strong Food is such as contains much Nourishment. In the  
Fame Sense 'Innst we take ἀιθενεστατη πέιατάνη. *Lib. de Rat.  
Vict. inMorb.* acut. Very weak Ptisan, for .such as affords but  
very littie Nutriment ; or, as *Galen* expounds it, τ ευθένβαν  
μὑτῆς, ίτοι διότι βραχεῖαν..τροφὴν τιά σώματι δίδωοιν, ἀκουστέον  
ἐστιν, ἤ οτι ποιότητα μηδεμίαν ἔχει σφὸδραν, ώς ἤτοι *astsi vdiferv* ἤ  
F γνώμης ἄπὸοθαι, καθάπερ όξος τε καὶ οινος’ " By its Weak-  
" ness we are to understand, either that it affords but flender  
. " Nourishment to the Body, or that it possesses no Vehement  
" Quality, by which it may offend the Nerves, or subvert the  
" Reason, as Vinegar or Wine. " - -

ASTHMA, see **DYSPNOEA. .**

ASTITES. The same as PARASTATAE, which see.

ASTOMOS, ἄστομος, from α Neg. and στομα, a Mouth.  
Without a Mouth. This can he apply'd to nothing but Mon-  
stars.. For the Fable of *Pliny,* winch gives an Account of an  
*Indian* People who live by Exhalations only, and have no  
Mouths, is utterly extravagant and puerile.

ASTRABES, ἀστραβἐς, from α Neg. and στραβὴς, distorted,  
undistotted. Λι γένυες άστραβέες, the Jaws undistorted. *Hip-  
pocrates de Articulis. ' - mi . '*

- ASTRAGALOIDES, BASTARD MILK-VETCH.  
. The Characters are ; ... ‘

' ' It hath a papilionaceous Flower, out of whose Empalement  
rises the Pointed, which afterwards becomes a Pod, shaped  
'almost like a Boat, and full of Kidney-shap’d Seeds.

We have but one Sort of this Plant, which is ;

*Aflragaloides Lnsitanica,* .Inst. R. H. PORTUGAL  
BASTARD MILK-VETCH. *Miller’s Dict. Fol. o..*

ASTRAGALUS. The Name Os a Bone in the Foot, and  
of a Plant. .' S

According to the natural Situation of the Foot, and its Con-  
nexion with the Leg, the *Astragalus* is the superior and first  
' - Bone of it. This Bone may he divided into two Portions, one  
large and posterior, which is, as it were, the Body of the Bone;  
and one small and anterior, winch is an Apophysis, or the an-  
terior Portion.

The Body or posterior Portion has four Sides, one superior,  
**two** lateral, and one inferior. The upper Side is the largest,  
cover'd all over with a Cartilage cylindrically Convex from he-  
low backward, with a Depression running thro' the Middle of  
its Breadth, which represents half a Pulley, and is continuous  
**with** the two lateral cartilaginous Sides, of which the external  
is broader than the other. This upper Side is articulated with  
the lower Side of the Basis of the Tibia, the internal lateral  
Side with the inner Ankle, and the external lateral Side with

the Outer Ankle. . Below the internal lateral Side there is a  
great Depression without Cartilage, and several other .Inequa-  
lities.

The lower Side is likewise cartilaginous and obliquely con-  
cave for its Articulation with the Os Calcis. At the very  
lowest and posterior Part of the Body of the *Astragalus,* on the  
Edge of the lower Side, is a small, oblique, smooth Notch or  
Chanel for the Passage os Tendons.

The Apophysis or anterior Part of the *Astragalus* is distin-  
guished from the Body by a small Depression on the upper  
Part, and on the lower, by a long, oblique, unequal Notch,  
Very broad toward the Outside. The anterior Side os this  
Apophysis is all cartilaginous, and obliquely convex, for its Ar-  
ticulation with the Os Scaphoides. The lower Side, likewise  
cartilaginous, is parted in two, and articulated with the Os  
Calcis; being distinguished from the lower Side of the Body os  
the Bone by the long oblique Notch already mentioned. Be-  
sides these two cartilaginous Sides, there is a third below the  
anterior, towards the inner Part, which in the Sceleton touches  
nothing. *WinsiovstsAnatomy.*

ASTRAGALUS. The Plant called by this Name is thus  
distinguished:

*.. Astragalus,* Offic. *Astragalus Dioscoridis quibus.dam, J. Be 2.*i4I. Chain I53. *Astragalus Dioscoridis, vulgo Christiana radix,*lauwolf. *An Astragalus Syriacus, J. B. 2.* I4o. Ger. *1058.*

*Emac.* I238. Park. Theat. I085. *Astragalus Syriacus hirsu-  
tus,* C.B. Pin. 35I. *Astragalus Syriacus, Onobrychis secre-  
frina quibus.dam.* Chain I5I. *Astragalus argenteus.* Wheal.

tin. THE SILK VETCH OF DIOSCORIDES.

The *Astragalus* is a small trailing Shrub, with Leaves and  
Branches like those of Chiches, and small purple. Flowers.  
The Root is round, and of a good Size like a Radish, with  
solid, black, *[Pliny* says red] and very herd Appendices,  
which are entangled within one another like Horns, and of an  
astringent Taste. It grows in windy and shady Places, [in rocky  
and sunny Places, *Pliny'}* and where much Snow falls\*. There is  
geat Plenty of it at *Memphis [Pheneum,* according to *Pliny,  
alert,* and *Oribasius] in Arcadia.*

The Root drank in Wine stops a Looseness, and provokes  
Urine ; dry'd to a Powder, it is with good effect sprinkled on  
old Ulcers, and stops Bleeding; but it is difficult to cut on  
account of its Solidity. *Dioscorides, Lib. am Cap.* 62.

Its Root is sweetish, astringent, and gives a deep Tincture  
of Red to the blue Paper ; the Leaves give it hardly any ;  
they are bitter, and smell like Elder, which shews that **the**fetid Oil is found in greater Quantity in the Leaves, and that  
it involves the acrid Salt and Earth. This Plant is not in Use ;  
Nevertheless, a Night'S Infusion of it in Wine is given with  
Success for Retention of Urine, and for the Gravel by some  
HerbaristS at *Paris. Martyrss Tournofort.*

*Dale* observes, that .the Description of the *Astragalus in  
Dioscorides* is so short and imperfect, that to this Very Day it  
remains doubtful to what Plant it helongs, some ascribing it  
to one, some to another. But whatever others may think,  
says he, I chuse to refer it with *Rauwolf* to the above-  
mentioned. . ;.

ASTRANTIA. A Name for Masterwort. See IMPE-  
RATORIA.

But there is another Plant also Called *Astrantia,* which is thus  
distinguished by Authors. .

*„ Astrantia nigra,* Ossie. Ger. 828. Rah Hist. I. 475. ***Aso****' trantia,* RiVin. ItT. Pent. Buxb. 33. *Astrantia mayor.* Mor.

Umb. 7. Elein. Bot. 263. Rupp; Flor. Jen. 226. *Asiran-. -  
tia nigra mayor.* Hist. Oxon. 3.279. *Astrantia mayor, corona  
stores purpurascente,* Tourn. Inst. 3I4. Boerh. Ind. A. 73..  
*Astrantia nigra Jive Viratrurn nigrum Dioscoridis,* Ger. emac.  
9)8. *Helleborus nigcr, Saniculae folio, mayor,* C. B. Pin. I86s  
Park. Theat. 2 I 3. *Sanicula fcemina quibus.dam, aliis Helle-  
borus nigcr, J.* Β. 2. 638. Chomel. 567. BLACK MAS-  
TERWORT. et.""’ /

This Plant is cultivated in the" Gardens of Botanists, and  
flowers in *“July.* Its black and fibrous Roots are only used. It  
is said to purge melancholic Humours; and *Dodonaus* think#  
that it resembles the *Veratrum nigrum* of *Dioscorides,* both in  
its Form and Qualities. *Hildanus* prescribes it for the Cure  
of a scirrhous Spleen. *Dales \**

ASTRAPE, ἀστραπὴ. Lightning. It is reckon'd by *Ga-  
len* amongst the Procatarctic Causes of an Epilepsy. *CasieL*

ASTRICTA. An Epithet Very frequently apply'd to *Alvus,*the Belly i It implies CostiVeness, and is oppos’d to *Solutes,*loose.

ASTRICTORIA. The same as **ASTRINGENTIA.**

ASTRINGENTIA» Astringents. '

1 shall here principally consider Astringent Remedies taken  
by the Mouth; for Astringent Topics come more properly  
under the Article *Styptica.*

Astringents are very proper to restore a Tone and Elasticity  
to the animal Fibres, when debilitated by Diseases, Intempe-  
rance, or Accident. But these are Very seldom proper with-  
out a previous Attenuation of the Juices, and **a** Course of

Deobstruent Medicines ; because Obstructions are more finely  
riveted, and the viseid Juices circulate with more Difficulty,  
when the Diameters of the Vessels are contractsd by Astrin-  
gents.

Among the several Classes of corroborative Medicines, that of  
*Astringents* is none of the least considerable and important.  
The several Substances which come under this 'Denomination  
are also by rhe *Latins* styl’d *Vulnerary,* and by the *Greeks Trau-  
matic* Medicines. Their Virtues in genend consist in a certain  
fix’d and gently constrictive Principle, by means of which they  
brace up the Parts and Fibres that are too much relaxed, cor-  
roborate those which are weakened, and consolidate and aggluti-  
- nate fuch as are corroded and wounded. The principal Medi-  
cines belonging to this Ciass arc the Roots of Avens, Tor-  
mentil, Bistort, the greater Confound, Cinquefoil, Plantain,  
and Rhapontio. The *Herbs* Periwincle, Sanicle, Winters-  
green,- the greater Confound, Bugle, Saracens Confound,  
, Gooseberries, Agrimony, St. *John’s* Wort, with its Flowers,  
Yarrow with its Tops, Horse-tail, *Pausu* Betony, Strawber-  
ries, Vervain, Mouse-ear, Tree Germander, all sorts of Plan.:  
tain, Oak-leaves,- *Jerusalem* Oak, Baum, Mint, Betony, and  
Lamium, or the Dead Nettle ; the *Flowers* of Roses and Balau,  
stines; the *Peruvian* Bark, that of Porngranates, and of the  
Root of the *Egyptian* Thorn ; *slump.nice* of the *Egyptian* Thorn,  
*japan* Earth, Dragon’s-blood, Hurtle-berries, and Quinces;  
of *Spices,* the Nutmeg, of *Mineral Substances,* the Blond-  
stone, Alum, and all Species of Earths and Maries ; of *Chymi-  
col Preparations,* the Chalybeate Flowers of Sal Ammoniac,  
and the Chalybeate Liquor prepar’d from the *Caput Mortuum*of the Chalybeate Flowers of that Salt ; of *Officinal Prepara-  
tions,* the Traumatic Essence of *Wedelius.*

The feveral Substances now mention’d operate by means of  
a considerably fix’d terrestrial Principle, in Conjunction with an  
AcidAnd as, by constricting the too much relax’d Fibres,  
they free them from a Congestion and Stagnation of Humours;  
so, by bringing them into a nearer Contaol with each other,  
they promote then Consolidation and Coalescence. But this  
constrictive Virtue is not equally strong and powerful in all the  
Substances we have mention’d ., for in the Tormentil-root, in  
the Bistort-root, and its Extracti, in the Balaustine-flowers, the  
Pomgranate-bark; the ,Oak-leaves, the Alum, the Chalybeate  
Liquor,, the Juice and Bark of the *Egyptian* Thom, the Quin,  
ces, and dry’d Hurtle-berries, this astringent Quality is much  
stronger than in whet we commonly call the vulnerary Herbs,,  
which consisting of a subtile, earthy, and alcaline Principle,  
intermix’d with Particles, of a sulphureous, balsamic, and'some,  
what fix’d Nature, operate, more stalely and mildly, and are' of  
singular Ufe and Advantage in the Practice of Physic. But that  
these *Valneraries,* as well as. the stronger and more powerful  
Astringents, contain a Principle of a subtile, dissolvable, and  
earthy Nature, is plain from this, that rich infusions of them,  
upon the Admixture of Vitriol of Mars, or even of any Chaly-  
beate Liquor whatever, become black, and assume an inky  
Colour, just as they' would do by the Addition of Galls..

If Skill-and uncommon CauUon'are requisite in the Use of  
any Medicines whatever, they are certainly *so* in the Admini-  
stration of *Astringents*; for since not only the Soundness of the  
Bedy in general, and of .its. several Parts, but also.Life itself, is  
maintains and presercedthy the perpetual, progressive, and cin.  
dilatory Motion of. sufficiently attenuated and fluid Humours  
throl the Compages of the Body, which is almost quite vascular,  
and composed of inconceivably minute and stender Ducts; and  
' since, - at the same time, such are the Natures and Properties of  
*Astringents* as to inspissate out Fluids, when mix’d with them,  
and brace up the Pores and Ducts of our Solids; -Sis therefore  
obvious to every one, that Remedies of this Ciass must he un-  
friendly to the very Natures, and vital Motions, of animal Bo-  
dies ; for which Reafon they are not so safe and secure as some  
may imagine, unless when used with the utmost Care and Cir-  
cumspection : For dairy Experience convinces us, that Medi-  
cines of an astringent Quality, rashly and unskilfully apply’d for  
stopping Haemorrhages or Fluxes, produce numberless fatal  
Consequences, and generally bring on flow Fevers, Cachexies,  
oedematous Swellings, spasmodic Disorders, Colics, and hypo-  
cbondriacal Indispositionsr For this very Reason, we are care-  
fully to. guard against the imprudent and immoderate Use of  
the *Peruvian* Bark, for, carrying off the Paroxysins of inter.,  
mittent Fevers; since by he violent Astringency the viscid,  
bilious, and salival *Sordes,* lodged in *tltie Prima Via,* and which  
ought to he discharged, are so much the longer shut up and re-  
tain’d, by which means a still more, formidable Disorder is  
sometimes brought on. . - ... . ..

\_ If Necessity should, at any time, call for the Uso of Astrin-  
gents of this Nature, they ate not to be administer’d all' at  
once, hue successively ingenue Dofes, and in Conjunction with  
a ssissicient. Quantity of forne proper Liquid, prescribing at the  
fame rime a due'Degree of Exercise for the Pationt, which I  
always do, when I either order *tlha Peruvian* Bark, or anyMe-  
.'secines whatever of the Chalybeate Kind.

’Tis highly unsafe and dangerous to repress excessive Vomit-

Ings, Discharges of bloody Urine, Hemorrhages of the Nose,  
Uterus, or Anus, and Spittings of Blond, by means of Astrin-  
fents; since the Patients are always sure to suffer by such a  
'ractice, unless the Spasins, on which thefe Discharges of Bloed  
for the most part depend, as much as Effects do upon their mi-  
mediate Caules, are first sooth’d, the violent and impetuous  
Motions of the Fluids cheek’d, and the exorbitant and preter-  
natural Affluence of Humours derived to other Parts.

The Traumatic or Vulnerary Heths, and Decoctions of  
them, are of very singular and uncommon Service, not only in  
Wounds, Erosions, and Solutions of Continuity, but alto in  
some Diseases of a chronical and violent Nature; such as "a  
Phthisis, Scurvy, Cachexy, and Disorders arising from the  
Stone, when these Indispositions draw their Origins from the  
Tone of the Viscera and Glands being weaken’d, or from a  
preternatural Stagnation os the Juices. But we ought, at all  
times, carefully to avoid using them in Cases where there is too  
great an Obstruction of the Vessels, a Constriction of the Fi-  
bres, or in a Phthisis, when the Lungs arc full of hard Tumors  
and Tubercles. However, in other Cafes, Infusions of vnine-  
rary and gently astri risen t-Medicines, are of singular Service,  
and produce excellentLffects , especially in preventing fabulous  
and stony Concretions in the Kidneys, which, for the most  
part, arise from these Organs being too much relax’d or ulce-  
rated. Upon this Subjecti.I would recommend *Flench erus s  
Dissertation, concerning the Use of Astringents in the Stone.* This  
Intention is also very well answer’d by Infusions of Yarrow and  
its Tops, of *Pours* Betony, Ground-ivy, Strawberries, Agri-  
mony, and the Bark of the *Egyptian* Thorn-root. In involun-  
tary Discharges of the Urine, arising from tod great a Relaxation  
of the Sphinctsr Muscle of the Bladder, whether in Children  
or in Adults, I heve found Infusions of this Nature produce  
very happy Effects; applying externally, at the same time,  
rectiry’d Spirits of Wine.

in Cafes where the external Parts are hurt or wounded, well  
rectifyid Spirit of Wine proves, by itself, a noble and effica-  
cious'Vulnerary ; since it puts a speedy Stop to Desiukions of  
the Blood and Humours, and is of singular Service where the  
more sensible nervous and tendinous Parts have suffer’d by too  
great an-Effusion of Blood ; for spirituous Liquors not only  
’coagulate the Juices of the human Body, as we find by making  
the Experiment uponBlood and Lymph, but also, by removing  
-the superfluous Humidity, render the Fibres tense arid rigid,  
and, by bracing them more strongly up, prevent Stagnations of  
the Blond, and carry 'off’ Pains and Inflammations; Nor is the  
spirituous Water, call’d *ly Eau di Arquebufade,* or *Aqua Sclope.  
.taria,* used in our own Days, a despicable Vulnerary, since’tis  
prepar’d, by Distillation in *"Balneo Mariae,* from fome of the  
best vuinerary Herbs, and *Rhenisc* Wine: But its Virtues and  
Efficacy are to, be ascrib’d to the Spint and the Wine, rather  
Shan to the Herbs, whofe Virtues are lodged in a fix’d earthy  
'Principle, which does not come over the Helm of the Still.  
*Hossenan.* Lemery *directs the Aqua Sclopetaria to be made with  
WonteWine.* See AQUA." )

The Simples commonly term’d *Astringents,* principally  
abound with rough, earthy, or saline Partioles, and are *of* a  
heavy compact Texture, which, at first View, forbids them to  
be meddled with, by Distillation. In Tincture likewise, with -a  
Tpirituous Menstruum, they are very unsuitable ; because their  
superior Gravities and Bulks will not suffer them to unite with,  
‘and'be suspended in, such Liquors.

. In Decoction, indeed, many *Astringents* may be retain’d  
with Efficacy, especially those of a saline and stymie Nature,  
as Alum, Galls, and Oak-bark; hut few others can 'he  
thus order’d to Advantage, because they-are too heavy sor Sus-  
pension in‘an aqueous Fluid.

There is somewhat, ’tis true, peculiar in the *Peruvian* Bark,  
that sits it sor this Management, beyond any other Simple- of  
the same Class: Its Particles are so very fine and light, when  
broken in the Mortar, that a great deal would be lost, were it  
not for a Mixture of somewhat moist and oily to keep it from  
flying away, which is commonly practised with Almonds, or  
somewhat of Ἀ like Nature; but this is certainly prejudicial to  
the medicinal Intention os this Drug. But in Decoction, with  
an aqueous Vehicle, this finer Part is not only saved, but like-  
wise all that is most subtle therein is stispended in the liquor,  
the grosser Parts only falling to the Bottom, as is very manifest  
from the Thickness *of* such Decoctions. .So that, in ordering  
of this by Decoction, there is ouly obtain’d the finest of its  
Substance, -which cannot he procur’d any other way; a thing  
very different from what is commonly expedied by this Process  
for here the Ingredient is in forne measure dissolved, and inti-  
mately united with the Liquor. Doubtless, in the Manage-  
ment of this Drug by Decoction, somewhat more is obtain’d  
than can be got by simple Tinctiue, especially where such In-  
gredients are added, that, by boiling, give a thicker Consist-  
ence to the Water; because then a much greater Quantity of  
the Bark will remain suspended therein. Thus, some order **a**small Portion of Stotax or Benjamin to be boil’d herewith,  
, which'not only enables the Liquor to hold up more of the Bark,

hut gives also thereunto such a Warmth and Scent, as. is *very*grateful to a Stomach weaken'd and pall'd by a Fever and  
Medicines.

The usual Distrust therefore os the Bark, in this Porfn, is  
ill-grounded, because it depends upon a Supposition, that it is  
not this way given in Substance ; whereas it is nor only thus  
given in Substance, but also with greater Advantages than can  
by any other means be come at. Tor when it is given in **the**finest Powder that can possibly he obtain'd from the Mortar and  
Sieve, it is yet too coarse for a weaken'd Constitution, and  
therefore frequently, by its Stimulas, brings on a Diarrhoea;

- whereas this way it is too sine to give any Tuch Disturbance in  
the first Passages, and not only strains, by the common Course  
of Circulation, much farther, but gives a more uniform and -  
general Contraction to the debilitated and relax’d Fibres. Those  
who try it this way also, seldom find so many Relapses as .are  
customary, after some Days, with the coarser Powder.

A very considerable Addition may be made to the medicinal  
Virtues of most os this Class in Decoction, by a Mixture of  
Acids, because they greatly improve any astringent or styptic  
Quality; and whosoever tries this, with the Park in-particular,  
will experience its Success in most Intentions for which it is  
ever used, but especially in that of a Styptic in Haemorrhages;  
in which Case also an Addition os red Roses, at the latter End  
of the Decoction, is not only of Service, but also helps agree-  
ably to disguise the Medicine.

One Caution ought by uro means to be here omitted,  
concerning this Form, with the Simples of this Class.,  
It is a Very common way, in the-.Shops, to clarify their '  
Decoctions with the White of an Egg,. to render them  
more beautiful to the Eye ; but where their Virtues are expect-  
ed from any thing glutinous, gross, or earthy, such Procedure  
.. quite destroys the Intention, because those Parts are entangled  
with the Egg, and rise up with it in the Scum ; and for this  
Reason it is, that almost all Syrups made from Decoctions are  
good sor nothing," because in their Clarifications they are robb’d  
os their Virtues. . . ..

There are, indeed, some Officinal Syrups from Materials of  
this Division, aS the Syrup os Mint, that os Myrtles, and some  
sew others; but the Neglect they are under in common Prac-  
ίice, shews what Service is to be had from them : They mays  
perhaps, serve aS weak Auxiliaries, to things of more Efficacy,  
in sweetening them, or reducing them into some convenient  
Forms, aS Boles, Electuaries, or the like, but no further are  
they to be trusted. ...

’’ In extemporaneous Electuaries likewise, things os this Tex-  
ture are Very suitable, and some, which require but small Quan-  
tities for a Dose, come well enough in Pilis; hut they are con-  
irived into Officinal Electuaries with great Disadvantage, be-  
cause of their -Jong Continuance in a moist Form; and more  
especially with Honey or Syrups, winch are, much inclin'd to  
ferment; and this subjects them to such Changes as quite  
destroy their medicinal Virtues ; for that.Hardness or Rigidity;  
wherein *their ^stringency,* consists; softens, and, asut were, rots,»  
with continual Moisture. Thus. the .Confection os *Pracasto-.  
rius,* which is a Composition wholly selected out of. this Class,  
grows extremely bad by. Age, and will in time change from **a-**warm,, rough *Astringency,* into an almost tasteless, soft, dipperp  
.Mixture. This Alteration,, indeed, is-much hasten'd by **ime'***Casia Lignea,* and *Gum Arabic so.* For Tins Reason manybhops  
preserve the Species for this Electuary dry ; as also those for the  
Confection of Hyacinth, tho' the College have now thought sit  
th reject the latter Composition. " All-the Simples, therefore, of  
this Denomination,, are with the greatest Advantage kept in  
dry Powders, sor extemporaneous Occasions, *SIuiricsts Pralect.  
Psearmacent. . - - - .*

’’ AST R ION ἵ. ἄστριον. The same as ASTRAGAL Us. ’

Y ASTROBLES, ἀςροβλἰις, or αστρὶβλητος, from ἄστρον, a.  
Star, and βἄλλων to strike. Planet-struck,: blasted. This is  
properly spoken of Plants; but is sometimes apply'd-to human  
Bedies, and then signifies *Apoplectic,* and sometimes *Sphacelated.*Hence, X. -. . .-J 2.’ ?

\* ASTROBOLISMOS, ἀστροβολισμός. Sideration, or blasting  
**os** Trees. But this is also sometimes apply'd to the Body, as in  
Sphacelations and Apoplexies. . \* — ..

ASTROCYNOLOGIA, from ἄτρας, a Star, κὓων, a Dog,  
and λόγος, a Dissertation, or.Treatife, The Name os a Trea-  
tise written on the Subject of the Dog-days.

ASTROITES, feu *stellaris* ss-estes, Ossic. C06. Med.16.  
*sistroites primus,* Boet. 298. *Astroites quartus.* Plot. Hist. Nat-  
Ox. p. 88. Tab. 2. Fig. 7. Lithog. Brit. N°. I 63. Charlt.  
Foss 28. Worm. 67. Schw. 366. Mer. Pin. 2II. *Stellaris  
lapis.* De Laet. 97. AldroV. Muf. MetalL 872. *Stellaris lapis  
primus,* Gesn. de Lap. 35. STAR-STONE.. . . :

This Stone is porous, moderately hard, and white, and as  
big sometimes as a Manis Head. It is found in some Quarries  
In *England* and *Germany.* It is esteem'd antipestrlential, and  
in said to destroy Worms in Children. ' ... .

ASTROLOGIA, from ἄστρον, a Star, and λόγος, a Word.  
Astrology. See **ASTRONOMIA.**

ASTRONOMIA, froth ἄστρον, a Star, and νομος, Caw\*  
-Astronomy..

No Part of natural'Knowledge has more employ’d the  
Thoughts of the Learned, than the Influence of the Stars upon  
human Bodies ; and, indeed, no one, who has but a moderate  
Acquaintance with polite Learning, can he ignorant of the Dis-  
putes and Controversies started on. this Subject by the Physicians  
andPhilosopherS of our own Age. Some deny and explode  
an Influx of the Stars altogether, but at the same time-a th.  
mit and patronize the Influence and Efficacy os the Sun .upon  
terrestrial Bodies. They who embrace this Opinion, affers,  
that the Planets and fix'd Stars are removed at.such an immense  
Distance from our Globe, that the very Light they diffuse can  
have no Influence upon it, much less that they themselves can  
produce any Effects upon siich Bodies as are contain'd in it.  
The Sun, on the other hand, is, according th them, the only  
Body whose benign Influence extends to our Earth, and whose  
kindljoWarmth rears up the vast.Variety of Plants, and che-  
fishes the several Species os Animals, with which it abounds.;  
for they will by no means allow, that the Planets produce any  
sensible or manifest effects upon any Paris of this our Habita-  
tion. But tho' I absolutely deny, that the Fates, the Morals,  
and the Fortunes os Men depend upon the Stars alone, 1 never-  
theless affirm,. that these have a Very surprising and remarkable  
Influence upon the several Bodies on our Earth. This Opinion  
has been embraced by many of the Moderns, but more especial-  
ly by the *Literati of England,* whose Industry; in clearing up  
this Point, deserves to be crown’d with all the encomiums that  
are due to profound Learning, and a disinterested Love of  
Truth ; for these Gentiemen have, with a great deal of Judg-  
mens, maintain'd the influence of the Stars, not only with  
regard to the Phenomena of *Meteors,* but also with regard to  
the. human Body, consider'd aS subject to Diseases and Disorders;  
Nor, indeed, could this Doctrine be unknown to the Antients,  
who ascrib'd a great deal to the Stars, and even carried the  
Point so sar, as to deduce the immediate Causes of the several  
Accidentsand Revolutions of Life from them. In short, they  
were, so prepossess'd in.Favour of this Notion, that they ac-  
counted for Health and Diseases, the Tempers and Dispositions"  
os Men, and, which is still more\*, the Fates os Kingdoms,, and  
the Origins of Wars, froth the influences of the heavenly BodieSf.  
As tills is the Case, it must be a Talk no less curious and plea-  
sant, than useful and profitable, to inquire, whether there  
really is such an influx of the Stars upon terrestrial Bodies, how  
sar it extends, and what Notions Truth and Fact will authorize  
us to entertain concerning it; and this is what I at present  
design'. - ' -sc .

Astronomy, then, or a Knowledge os the Stars, has all along,.  
eVen from the earliest Ages, been highly esteem’d, and had in  
the greatest: Honour. It is at first said to have been invented by.  
the *Egyptians,* and by them transmitted to other Nations,  
where in met with a favourable Reception, and many zealous  
Votaries. And, indeed, the Reasons are plain why the earlier.  
Ages paid such an uncommon Veneration to this Science, since  
they were sufficiently appris'd of the nurnberlefS Advantages  
which accrue to Mankind from the Stars and heavenly Bodies:  
For Astronomy acquaints us' with the Various, but still regular,.  
Courses of different Stars, and discovers their Positions, Mo-:  
tions, and Conjunctions; which are not only glaring Instances.  
of the amazing Grandeur and Extent of the.universal System,  
but also irrefragable Proofs of the Skill and Wisdom of its adora-  
ble Author: Besides, all fublunary Bodies partake os the benign  
Influence of the Stars, which by;their genial Rays diffuse a cer-  
tain Life and Vigour to them. By Observing the Stars we are  
enabled to discover the Situations of different Seas and Conn-  
tries, to ascertain, the-Distances of Places, and measure, out,  
Time into the several Divisions of Years, Months, and Days.  
By means os the Heavenly Bodies timorous Mortals were taught  
th despise the Fury os the Waves; and the daring *Ph cent clans,.*trusting to their Skill in *Astronomy,* first ventur'd to sail upon  
the Main, and trust their Lives to Ships, render’d less danger.»  
ous by their Knowledge of this Science. By this we are also,  
enabled not only to account for., but also to soretel and calcu-.  
late the several Eclipses of the Sun and Moon, with the great- .  
est Exactness and Precision.. 'Tis not therefore to be doubted, ,  
but. the different .Situations- and Positions of the Stars vary **the**State os the Weather,-and the Seasons of the Year, and conse-.  
quentiy induce Various Changes both upon Vegetables and Ani-  
mals. For this Very’Reason, 'tis necessary every Physician  
should be acquainted with*lAstronomy,* that he may he enabled,  
to account for epidemical Distempers: But let it be remem-  
her'd, that, when L require *Astronomy* in. a Physician, I do  
not mean tliat Mock-science below all Regard, which,  
with a great deal of *fuseenstttious Solemnity,* and no *Truth*at all, predicts the Fortunes, the Distempers, and the Deaths  
of People, by drawing what we call their *Horoscope,* or inquire-  
ing into the Positions ’arid.Aspects of the Stars at the Nour of  
their Nativity. Those trifling Mortals, who apply their Minds  
to this diminutive Study, lose their'Labour in an egregious  
manner ; since thev cultivate and adore a *Science,* (pardon the

Name) which has neither *speculative T.rnth,* **nor** *Use in human  
-Life,* to recommend it. They might indeed, with my Leave,  
reverence it aS highly as they would, provided the Dignity Of  
genuine and real *Astronomy* was not brought into Disgrace by  
their Folly and Impertinence: But **I** find myself animated with  
aijust Indignation, when Ϊ reflect, that this *predicting Art* has,  
in some meafure, deprived *Astronomy* of that Esteem and  
Veneration which were once so justly paid it. I frankly  
own, that the Stars, considered as remote Couses, may con-  
'tribute somewhat eVen in Things of this Nature; but I can  
never, at the same time, admit, that any such Occur-  
rences can possibly he predicted from them alone: For  
this Reason many of the Antients not only mentioned this  
Practice as an Abuse, but severely censured it as such. Of  
these the most noted is *Albertus,* who, considering the Time in  
which he liv'd, is deservedly esteemed a great Man. This Au-  
thor, in his Book *de Mincral. Tract.* 3. Co 3. haS these Words,  
" Many,'' says he, iC who pretend to foretel Things from the  
" Stars, are often sound to he wrong in them Predictions ; and  
"by their Lyes bring *Astronomy,* which is a Valuable and use-  
." ful Science, into Contempt and Disgrace.'' *Avcrrhoes* is of  
the same Opinion ; for in the *Cautica Avicenna* he uses these  
Words : " The Art os Astrology is ill sounded, and its Prin-  
" ciples are for the most part salse." *Apollonius* also is, by  
*Philostratus,* represented as giving his Suffrage in our Favour.

As for my Share,'' says he, " I think the Power of predict-  
" ing Events from the Stars, and the Art of Divination in ge-  
" neral, are Things placed beyond the Reach of the human  
" Faculties; neither do I know, that any Mortal isa real Master  
" of them." No less intolerable is the Insolence of those who  
distinguish Days into *lucky* and *unlucky',* and with that View  
compose annual Calendars. These infallible Prophets, with a  
happy Clause of Reservation,, which bears. *Is.God please,* pro-  
nounce like so many Oracles, that such and such Days shall he  
luchy, and such and such others the Reverse; and what crowns  
the Farce is, that their Knowledge and Skill in this way extend  
‘to rhe most ridiculous and inconsiderable things in Life ; for, in  
the Books of this worthy Class of Mortals, you may he in-  
formed which Days are most lucky for putting on a new Suit  
of Cloaths; and which most proper *for* counting your Money.  
From these Magazines you may learn, which Days you ought  
to choose for selling, and which for making Purchases. These  
Treasures of useful Knowledge will also direct you to the Very  
Day on winch you ought to cut your Hair, or shave your  
Beard. Here their matchless Impudence does not stop, but  
boldly incroaches on the sacred Province of Physic, by fixing  
some Days as particularly proper for Venesection, Purging, and  
the Exhibition of other Medicines. *Langius,* who waS Master  
at once of the Simplicity and Learning of the Antients, in  
sip. 35. p. I. on this Occasion salis into this rapturous Excla-  
mation, *O Flagris dignum Facinus, quo innumeros perdunt  
eegros f Ci* O blackest of Crimes, and worthy of the severest  
" Chastisement, since by it Numbers of Patients are de-  
" stroy'd l''

But tho' we reject the superstitious Fables of Astrologers, as  
impertinent and idle, yet we must beware of running into the  
opposite Extreme, and utterly denying all Influence and Effi-  
cacy of the Stars. If we should, our Conduct would be highly  
impious, and throw a manifest Reflection upon the Wisdom  
and Skill of that Being who formed the Vast and harmonious  
Frame of Nature; for we cannot possibly suppose, that the  
spacious Canopy of Heaven was thus hespangled with radiant  
Orbs, and adorned with twinkling Stars, for no other End  
than to direct our Steps by their Light, feast our Eyes by their  
-Splendor, or gratify the noble Excursions of our Fancies by  
the Immensity of their Number. We ought rather to con-  
elude, that the adorable'Author of Nature designed them for:  
dispensing Blessings of a higher and more important Nature to  
The human Species. The furprifing Number, the vast Bulk,  
and the regular Motions, of the heavenly Bedies, struck the  
Antients with such an awful Veneration for them, that they  
paid them a divine Homage, erected Altars for them Worship,  
and in short neglected no Circumstance by which they could'  
testify an unfeigned, but impious and ill-founded Regard for  
the Stars. They were well apprised of the Efficacy of these  
Bodies, and throughly convinced, that they imparted Life and  
Vigour almost to every sublunary Object. For this Reason 'tis  
the less to he wondered, thet the antient Physicians consulted  
the Stars so much in the Cure of Diseases, and rely'd so firmly \*  
on the Observations they made from them. But though their  
Diligence in this respect calls for due Encomiums at our Hands,  
yet their Fate is to be lamented; hecause their want of due Ex-  
perience, and proper Observations, left them in the Dark, as to -  
the real Manner in winch the Stars operate on terrestrial Bodies.  
The Nature and extent of this Influx or Operation is whet I  
now intend to handle, and that in such a manner, as to separate  
Truth from Falshood, and distinguifn hetween what is useful,  
and whet is trifling. For this Purpose It teems neceffiary, that  
I not only confirm my Opinion by the Authorities of the

**Learned, but** also give it the more, noble and weighty Sanction  
**of** Reason and Argument.

- TIs therefore my Opinion, that not only the Sun and  
Moon, but also **the** other Stars, **the** Planets more especially,  
**operate** upon terrestrial Bodies ; and that immediately by the  
**.either** and Atmosphere, these, bring influenced and changed  
by **the** Stars, must of Consequence induce Various Changes and  
Alterations, not only on Vegetable, but also on animal Bodies.  
Thus 'tis past all Dispute, aS I shall afterwards endeavour to  
shew, that the Stars are capable of exciting Various Storms,  
Winds, and Commotions in the Atmosphere; from which Cir-  
cumstance we may easily conceive the Possibility of their in-  
ducing Alterations, and exciting Commotions, in our Bodies.  
Hence any one, who allows himself to think, must plainly see,  
that Astronomy is not only an Ornament, but also a real and  
genuine Advantage, to a Physician.

- I shall now collect the most noted Passages of the divine *Hip-  
pocrates,* which heve a Tendency either to illustrate the Truth,  
Ur prove the Importance, os this Doctrine. The *first uf these is*that elegant Paflage in his Book *de Acre, Locis, et Aquis :* " If,"'  
says he, " any one diligently observes the Changes of the Sea-  
" sons, and the Manner in which the Risings and Settings of  
" the Stars happen, he will by this means he qualified to fore-  
" see the State of the Weather throughout the Year." And  
in another Treatise he affirms, in aS many Words, " That no  
" one ought to commit the Care os his Health ro him who is  
" ignorant of Astronomy, hecaufe such a one cannot be a  
" well-qualified Physician."’ And again, in his Book *de Acre,  
lac. et Aquis,* " Tis,'' says he, " absolutely necessary we  
" should consider the Risings of the Stars, especially of the  
" Dog-star, ArcturuS, and the Pleiades, fince, at these Very  
" Seasons, Diseases are most skilfully prognosticated ; and  
" those winch will prove mortal, best distinguished from those  
" milder ones, which will either entirely quit the Patient, or  
" pafs into Disorders of some other Form and Nature." On  
the Whole, *Anatomy* is the Right Eye of Medicine, and a  
*Knowledge of the Stars* its Left. And the Physician who is  
ignorant os *Astronomy,* says *Albo Hazaa Halii Filius Aben~  
ragel, ci* is liken blind Man, whe, groping *for* his Way without  
" a Staff, stumbles hither and thither at random ; or like an.  
" insatuated and irresolute Fool, who is guided in his Conduct  
" by salse and delusive Appearances of Good and Evil."

That the heavenly Bedies operate on our Atmosphere, is also  
asserted by the diVine *Hippocrates* in that memorable Passage *as*his Book *de Flatibus,* where he uses theso Words : " All the  
" intermediate Space hetween the Heavens and our Earth is sil-  
" led with *Spirit* ; and indeed the Efficacy and Virtues of **the**" Sun, Moon, and Stars, are imparted to us by means of this  
*" Spirit.”* By the *Spirit,* or τὸ πνεῦμα, in this Passage, he  
without Doubt understands the Winds, the ./Ether, and the  
Atmosphere.. But *Galen, Lib.* 2. *Prorrheticor.* beautifully de-\*  
monstrates the Influx of the Stars upon terrestrial Bedies in these  
Words : " If,” says he, " the mutual Aspects of the Stars  
" had .no Influence on things helow ; and if the Sun alone,  
" that glorious Source of Light and Life, should only he al-  
" lowed to act upon our Earth, then the four Seasons of **the**" Year would invariably preserve the fame Appearances and  
" Temperature, fince the Sun performs the same Course in one  
" Year that he does in another. But the Seasons os the  
" Year are not, in Consequence os this, invariably of the'  
" same Nature and -Temperature. The Stars must there-.  
" fore concur in producing their different Qualities in different  
" Years." But I shall now have recourse to the Suggestions  
of Experience, and from them deduce the Power and Efficacy  
of the Stars in raising Storms, exciting Tempests, and modu-  
lating the State Of the Weather in general. And here 'tis par-'  
ticularly to be rememhered, that we are not so much to regard'  
the several Aspects of the Moon with respect to the Planets, as  
the-mutual Aspects os the Planets with regard to each other ;  
though the Moon is not at the same time to he entirely over-  
look'd and disregarded in this Affair. *Cook* and *Goad,* two  
celebrated *Englijh* Philosophers, heVe Very judiciousty made **the**same Observation ; and indeed repeated Experience has con-\*  
firmed me in the full Persuasion of it.

. When *Saturn* has an Aspect to any Planet, except the Sun,  
whether he is in Conjunction with that Planet, Or in Oppo-  
sition to it ; whether his Aspect with regard to it he sextile,  
trine, or quartile, he compresses the Air, and excites cold  
Winds, which for the most part blow from the North. Hence  
in the Winter Season he produces keen and intense Frosts,, and  
renders the Nights serene and clear ;’ and in the Spring Season,’  
especially in the Month of *May,* firch Aspects usher in a sudden  
and unexpected Cold, which proves hurtful to Plants, especially  
those of the exotic Kind, or such as are not the natural Produce '  
of our own. Soil; when, on the other hand, *Saturn* is in Con- -  
junction with *Venus, "aeeo* may expect cold Rains, accompanied .  
with Westerly and Northerly Winds.

*Jupiter* concurring in any of the forementioned Aspects with  
another Planet, is generally observed to excite Winds, especially

in the Spring and Autumn ; and st rarely .'happens, that loud  
and boisterous Winds blow, but *Jupiter* has at that Very Sea-  
son an Aspect to someOf the rest os the Planets, which savours  
the Production thereof. Among the Rain-producing Planets,  
*Venus* is .the principal, especially when she is in Conjunction  
with *Mercury, Saturn, or Jupiter.* The principal Planets  
which exhilarate the Face of Nature with ferene Weather, and  
convey a genial Warmth to JouraAtmolphere, .are the *Sun* and  
*Mars,* .especially in the Summer Season, .arid when they happen  
to be in Conjunction with .each other. They also produce the  
same Effect, though in a milder Degree, when they are in Con-  
junction with *Jupiter* and *Mercury. . . .*

*Mercury* produces such inconstant Weather, that by his In-  
fluence Showers, serene Weather, and cloudy louring Skies,  
mutually succeed each .other, frequently in one and the same  
Day. He .excites Winds .when, in Conjunction with *Jupitcr,*and Rains when joined to *Vinus.* 'Tis also io be observed,  
that the Operations of these Planets vary very widely, according  
to the different Situation of ths Sun, and the Various Seasons of  
the Year : For in the Winter Season *Saturn* excites far more  
. nipping Colds titan in the Summer. *Sol* and *Mars* also produce  
fainter and weaker Heats in the Winter, than in the Summer  
Season. *Jupiter* and *Mercury* exert their Force and Influence  
more powerf ully in producing Winds in the Spring.and Autumn,  
than in the Summer. But os all the Seasons of the Year, none  
has the Misfortune to he rendered so disagreeable and pernicious  
by stormy and inconstant Weather, as the Autumn; sor which  
Reason it is a Very dangerous Season, and puts an End to the  
Lives os many, : by the great Variety of too sensible Changes  
induced on the State of the Air and Weather ; fince about Noon  
the Ain is hot, and in the Evenings, Nights, and Mornings,  
very cold. .........

'Twill not on this Occasion be improper to inquire how sar  
the Moon contributes either to increase or. diminish the Force  
and Influence of the Planets ; for 'tis plain, from many accu-

. rate-Observations, thet the Full Moon so surprisingly imparts her  
Light to the other Planets, as in a remarkable Manner to in-  
crease and heighten their Influence and Efficacy. And, what is  
still more wonderful, her Influence upon them is so 'consider-  
able, that they sometimes anticipate it two or three Days before  
the Aspect becomes persect.and complete. Besides, the Power  
and Influence os the Moon is sufficiently demonstrated by this  
Circumstance, that, under all her Quadratures the Stats of the  
Air is not only affected, but undergoes Very considerable  
Changes. For this -Reason the Antients, by way of eminence,  
styled her the *Mistrefs of the Weather,* because by her Means  
they were able .to account, for the Seasons, and their various  
Changes. Every one also knows how sensibly the State of the  
Weather is altered by the various Changes of the Moon ; so  
that, according as the New Moon approaches, the Weather we  
enjoy’d during the Old is proportionably banish'd, and a differ-  
ent State of Weather gradually comes its. If the Curious de-  
fire farther Satisfaction in this Particular, they may consult the  
learned *Cook's Meteorology, Rsid Goad’s Meteorological Treatise.*'Tis past all Dispute, as that excellent ..Astronomer *'Kessler* has  
observed, that the Aspects os the Planets induce -a very sensible  
- Change on Meteors, and are os Very considerable Influence in  
exciting Storms and Tempests ; -the Degrees and precise Times  
os which it were to he wish'd we could more accurately pre-  
dict and determine: But we want a sufficient Number of Ob-  
servations for thet Purpose. How difficult it is to form an in-  
fallible Judgment in Matters of this Nature, may be gathered  
from this, that the preceding Aspects produce very considerable  
Alterations and Changes in those that .follow them. To this  
may be added the Situation of the Place, the Nature of the Ef-  
fluvia, and the Climate itself, winch, upon an accurate Calcu-  
lation, will be found to produce Changes no less considerable.

. Experience itself, the surest Guide to Truth and Knowledge,  
evidently demonstrates to us, that the Aspects of the Stars have  
a surprising Influence, not only on Meteors, but also on our  
Bedies. This is sufficiently proved by the: Vernal equinox,l«nd  
the Summer. Solstice, about winch Seasons the Force and Vio-  
lence of Intermitting Fevers are either considerably weakened,  
‘or totafly eradicated and destroyed. And, upon the Approach of  
the Summer Solstice, obstinate Quartan Fevers, which, are ge-  
nerally produced by the Autumn, and are for the most part un-  
conquerable at other Seasons, do of their own Accord remit,  
and easily yield to the Force and Efficacy of Medicines. It. is  
also confirmed by undeniable Experience, tliar,. about the Vernal  
and Autumnal Equinoxes, the Humours of our Bedies are in  
greater Commotions than at other Times. At these Seasons, also  
the Motion of the Blood is more unequal than at others ; foi  
which Reason large and frequent Haemorrhages then happen to  
those who are subject to them. These Seasons are principally  
hurtful to old Men, who, in Consequence of them, are trou-  
bled with heemorrhoidal Discharges, or at least with the Efforts

of Nature to throw the Blood off by the Mouths of these. Veins..  
And if these Excretions are not duly carried on, especially in  
those of tender and delicate Constitutions, Various Disorders  
arising from Spasms, together with. Pains in the Abdomen, and

aheut the Parts destin’d for the Evacuation of Blood, are by  
.that means brought on. These Seasons are no less dangerous  
to those whose Circulations are languid, and who are advanced  
in Years, wheat these Times have Reason to he afraid of Vari-  
-Ous Stagnations and Infarctions in these Parts. For -this Rea-  
son they have both Theory and Experience on their Side, who  
hesore the Equinoxes carefully recommend and injoin Vene-  
section to People of plethoric Habits, and such as are subject to  
Effusions of Blood ; for by this means the most effectual Me-  
thod is taken to prevent the Disorder; and tho Effusion os  
Blood, which otherwise seemed ready to make its Appearance,  
is both quickly and safely warded off; -If the Blood discovers a  
Tendency to discharge itself by the haemorrhoidal Veins, Ve.l  
liesection in the Foot is most proper, if on the other hand it  
is -inclined to come away by the Lungs and Nostrils, a Vein  
is most advantageously opened in the Arm.

. The Equinoxes are particularly prejudicial to Phthisical and  
Hectic Patients, and such as languish under flow Disorders. Is  
at these Seasons chronical Disorders -happen-, they generally ter-  
minate in the Death os the Patient, or in a welcome Recovery;  
but it rarely happens, that Patients labouring under Diseases os  
this Nature survive the Equinoxes, but for the most part fall  
unavoidably Victims to the Force of the Disease with which  
they struggled. - . \* ι. . - .

During-the Winter Solstice, Nature is in her weakest State,  
the Body languishes; and becomes less fit for Secretion and Ex-  
cretion, than at other Times. For this Reason those wheat  
this Time are seized with acute Disorders, are in imminent  
Danger, and frequently die. At this Season also the smallest  
Error committed with regard to Regimen, and the Non-natu-l  
rals, is attended with fatal Consequences, and often lays too .  
sure a Foundation for Diseases. The learned *Banctortiis,* in his  
Treatise *de Medicina Statica,* well observes, that; about **the**Winter Solstice, we perspire a Pound less than at other Times.  
By which Observation he plainly demonstrates, that at this Sea-  
son the Perspiration is defective, the Motion of the Blood lan-  
guid, and the Force os the moving Fibres weakened and im-  
paired. For this very Reason the divine *Hippocrates,* in his  
Book *de Aere, Locis, et Aquis,* discards the Use of - Medi-  
cines about any os the Solstices, in these Words; " But we  
" are above all things to have a Regard to the more remarkable  
" Changes of the Seasons, especially the Solstices, on which  
" Occasions we must neither exhibit purging Medicines,  
" φάρμακον, without urgent Necessity, apply Cauteries, nor  
" make Incisions on the Belly and adjacent Parte, 'till ten Days  
" or more, but never sewer, after the Solstice.'-

Imow come to speak of the Force and Influence of the Sun  
upon terrestrial Bodies ; and indeed of this we have not the  
least Reason to doubt, since the Point is plainly proved by the  
different Seasons of the Year, and their several Changes  
and Alterations. The sensible Changes produced in our Bo-  
dies by the different Seasons of Spring, Summer, Autumn,  
and. Winter, are Circumstances too plain and obvious to  
stand in Need of a long and tedious Proof Each of these  
Seasons has Diseases proper and peculiar to itself, as Expe-  
rience teaches us, and as *Hippocrates* strenuoufly inculcates  
in all the Aphorisms of his third Section, but more sally and  
particularly in the nineteenth, where he uses these Words:  
" Diseases, indeed,'of every Kind, happen at all'Seasons ; but  
*" some* Disorders more readily appear at certain particular

Times, than at others ; Thus Madness, Disorders arising  
" from black Bile, Epilepsies, Effusions of Blood, Qtrinseys,  
" Heaviness, Hoarseness, Coughs, Leprosies, Tetters, ulcer-  
“ ated Pustules, Tuhercles, and Disorders of the Joints, are  
" more frequent in the herring than in any other Season." And  
in the-succeeding Aphorisms- he enumerates the Disorders pecu-  
liar to each Season. - In the twenty-first he musters up those  
peculiar to the Summer; in the twenty-second, those which  
rage in the Autumn ; and in the twenty-third, he gives a Cata-  
logue Of the several Disorders winch harass Mankind in the  
Winter Season.

- 'Tis a Circumstance particularly worthy of our Regard,-that,  
more People die in *March,* than in any other Month of rhe  
Year, except *October,* whose Influences prove equally fatal; and  
destroy a no less considerable Number. This iS owing to no.i  
thing else but the Inequality and Inconstancy of the State 0f rhe  
Air during -these Months; for at these Seasons an intense and  
nipping Cold sometimes prevails ; sometimes, soon aster, the opt.  
posite Extreme of Heat succeeds. Besides, the State of the At-  
mosphere is on these Occasions highly corrupted, and: impregn-  
ated with noxious Exhalations, which- heing too gross and  
weighty to he carried up, remain near the Surface of our Earth,  
and produce numberless Disorders and Diseases. Hence the  
Body, not being able to bear the Intemperature of the Air, is  
suddenly thrown into various Disorders, and rhe Tone of the  
Fibres is miserably weakened ; for the Strength and Elasticity  
of the Fibres bear a direct Proportion to the State of the Ain.  
The Circulation of the Fluids; on the other hand, bears a direct  
Proportion to tlie elashoity and Tone of the Fibres; and, in  
fine, such-as the Circulation is., such will the several excretions

he. Since then at these Seasons-the Secretions are saint and'  
. languid, the Humours must os Consequence become impure,  
stagnate in different Parts, and produce Various Disorders ; for  
. either, by stuffing up the Vesseis, they dispose some to flow and  
. chronical Disorders, or, by distending them by their too great  
Quantity in others of more robust and hardy Constitutions,  
they excite spasmodic Contractions, which usher in Haemor-  
rhages, a Species of Disorder more frequent at these, than at  
. any other Seasons.

The Influence of the Sun, though great in several Instances,  
is yet most remarkable in this, that Diseases either remit, or  
.resume theirVigour according to its Course. Thus ’tis plain from  
.Fact and Experience, that the Exacerbations of continued Fe-  
vers happen about the Rising of the Sim, and that the Paroxysms  
os Tertian Fevers generally seize the Patient about Noon.  
The Paroxysms of Quartan Fevers, on the other hand, gene-  
rally happen in the Afternoon ; and Catarrhal Fevers, for the  
most part, exert their highest Violence towards the Evening.  
The same holds true in Defluxions, heavy Pains, and Tumors,  
which generally afflict People most in the Evening.

The Moon also produces Very considerable Changes and  
Alterations in morbid Constitutions. We shall therefore first  
consider the Effects of her heing eclipsed, a Phaenomenon of  
which the Valetudinary and indisposed are too, too sensible. To  
this Purpose, *Juan. Matth. Fabcr, in Append. Dec.* 2. *Ann.* 8w.  
*p.* 49. relates the following Fact: " A Gentieman, says he,  
*" of* more than ordinary Distinction, and naturally of a me-  
" lancholic Habit, became sad, morose and pensive, the Day  
" before the Eclipse; but at the Very Time os the Eclipse,  
." he, like a Mad-man, with a Sword in his Hand, ran furi-  
" oufly, not only up and down his own House, but also those  
" of his Neighbours, and the adjoining Streets, not only wound-  
" ing Men, but also breaking Chairs, Doors, and whatever  
" came in his Way." The illustrious *Ramazycini* has made a  
Very curious and important Observation concerning the Con-  
stitution *os the Years* 1692. and I693. which is, that after the  
Full. Moon, and much more at the Change, the Petechical  
Fever, which raged in these Years, became more fierce and  
Violent; whereas it assumed a milder Nature, and a more fa-/  
Vourable Set of Symptoms, upon the Approach of the New  
Moon, but generally killed the Patients upon the Access of an  
Eclipse.

The Quadratures of the Moon also induce Very remarkable  
Changes and Alterations upon languid and Valetudinary Con-  
stitutions : Thus Epileptic Fits, hr some, return on stated Days  
and Hours, that is, when the Moon returns to a certain Point  
Of Quadrature, and at the New and Full Moons. And the in-  
shined Penmen themselves [*Matthew, Cap.* 4. *Vcr.* 24 and 47 .J  
styled the Maniacs, and such as were subject to Epileptic Fits,  
Σεληνιαζόμενοι, sor no other Reason, but because they were in  
a peculiar manner affected by the Changes of the Moon. A  
certain Baron os *Limburg* had a young Man sor his Servant,  
who, at every Full Moon, used to thrust his Head out a Win-  
dow when it shined, and twist his Neck like a Serpent, till, be-  
ing seized with a kind of ecstasy, he dropped down, and re-  
mained for some time motionless. *Observ.Rumleri* 66. *ap. Vilsch.  
Curat, et Observat. Cent.* I myself know several, who about  
the Full Moon are often subject to Head-achs, and Cardialgias,  
arifing from the Stone. That, about or after the Full Moon,  
many have heen seized with Apoplectic Fits, the learned *Wepsi-  
fer,* in his .Dissertation *de Apoplexia, p.* 3. *et seq.* has suffici-  
ently consumed by many Instances.

How great the Influence of the Moon upon the Female Sex  
is, may be plainly deduced from this, that the New and Full  
Moons carry on and support those Monthly Discharges on which  
their Health depends; hence this Discharge is, by way of Di-  
stinction, styled the *Lunar Tribute,* because the more remark-  
able Changes of the Full and New Moon rarely happen, with-  
out ushering in the Menstrual Evacuations of such Women as  
are blessed with Health, and Soundness of Constitution.

This Influence of the Moon upon Bodies induced the more  
superstitious of the Antients to pay it an uncommon Adora-  
tion, and foolishly address her for fruitful Seasons in their pub-  
lic Prayers. The *Raman* Women imagined, that it was Very  
serviceable to them in bringing their Children into the World ;  
for this Reason they paid a religious Veneration to *Lucina,* or  
the Moon, thinking by this means to render her propitious at  
their *Deliveries.* The Moon seems to heve been invoked by Wo-  
men in Labour, for this Reason principally, that her peculiar  
Office consists in dilating the Apertures, and inlarging the Pas-  
sages os the Bndy; a Circumstance, aS Women well know,  
os no small Importance in ushering a Child into the World. .  
See *Macrob. SoturnaI Lib.* 7. *Cap.* 16.

At the Full Moon, scrophulous Tumors,. as also those of the  
Belly, and glandular Parts, hecome larger chan at other times,  
but subside, and become gradually left, in proportion as the  
Moon decreases. .To this Purpose, tho learned *Mana. Hiosse  
man[Dec.* II.Jh.6. *Obsieru.* I6I. *Mis.c. Curiofy* relates the fol-  
lowing Story : " A Girl, says he, of fourteen Years of Age,  
" and the Daughter Of an Epileptic Mother, had her Belly gta..

" dually swelled as the Moon increased, and as gradually ren- '  
“ dered less, and reduced to its natural State, as it decreased.  
." She was also racked with the most Violent and intense Pains,  
." during the Time her Belly was thus distended." *Aulus  
Gellius, Noct. Artic. Lib.* 20. *Cap.* 8.. in like manner informa  
us, that Oysters, and all Shell-fish in general, hecome gradu-  
ally large as the Moon increases;. and as gradually waste away,  
and become less, as it decreases, and hecomes old. He also in-  
forms us, that other Animals are inlarged and diminished, ac-.  
cording to the Various’Changes of the Moon ; and *Hippocrates*is of Opinion, that most Women generally conceive about the  
Full Moon.

*R. Bennet,* whose industry cannot be enough admired, has  
[in *Theatro Tabidarum, p.asts. et* 99.] observed, that during the  
first Quadratures of the Moon, or when it begins to arch itself  
into Horns, and more especially on the Nights preceding the  
New Moon, those Diseases which arise from a' saline Matter,  
are exasperated : For the same Reason, Aches, Itches, and all  
the Various Species of exanthematous Eruptions, do, on these  
Occasions, exert their highest Rage, to the no small Uneasiness  
os the Patients; whereas in the last Quadratures of the Moon,  
and when it is become quite full. Water and Humours are ac-  
cumulated in the Body, as is plainly proved from those Dis-  
eases which arise from a Vitiated Serum. For this Reason Co-  
ryzas, lethargies. Asthmas, Palsies, Cachexies, and all Dis-  
eases arifing from a corrupted State of the Lymph, rage more  
at these Seasons-than at others.

*Galen* [in *Lib.* 3. *Prorrhetsp* has written beautifully on the  
Influence the Moon has on the human Body ; and how much  
terrestrial Bodies are subject m its Impressions, is too much felt  
by those whaare troubled with Arthritic or Venereal Defluxions ;  
for, according as the Moon bears an Aspect to temperate or  
intemperate Planets, it accordingly procures Days os Ease and  
Rest, or the Reverse, to such Patients. Its monthly Motion  
not only produces sensible Alterations in the human Body, but  
its diurnal .Course has also a manifest Influence upon it. This  
Fact has been observed by many, but is by none more distinctly  
talked of, than *Carolus Pise,* in these Words *[Hast. Natural..  
Lib.A. p.* 24.]: " The State of the Sick plainly proves, that  
" Diseases are heightened, and Pains increased, in those six.  
" Hours, during which the Tide flows; and that the Sym-  
" ptoms are again remitted in the six Hours, during which the  
" Flood ebbs. This Fact holds in chronical aS well as acute  
" Disorders; but more especially in such as draw their Ori-.  
" gins from Defluxions, and too great a Fuiness of the Vesseis.  
" It is also known, that when high Tides, and Swelis of the;  
" Sea, happen about the Full Moon, some People are Valetu-  
." dinary; and that most People die during the Ebb os the  
“ Tide."' This judicious Author asserts, that these Phaeno-  
mena, in a great measure, depend upon the powerful Influence  
of the Stars, and the occult Qualities of the Sea and Heavens.

I need not here mention the surprising Influences of the  
Moon, on the Fruitfuiness, increase, and Decrease of Plants,  
fince the Experience of Botanists and Hushandmen places  
that Truth in a Light too strong not to be perceived. How-  
ever, among other Instances concurring to prove this Point,.  
it is observed, that after the New Moon Trees are transplant-  
ed with the greatest Prospect os their proving fruitful. Upon  
this Occasion I must also take Notice os this Difference, thet  
Trees grafted when the Moon is in the Full, hear Fruit sooner.  
than others; but their Fruit is less, and more stony. Those  
Trees, on the other hand, which are planted about the New  
Moon, bear later; but make amends sor this by the Beauty and  
Quantity of their Fruit.

All Plants, winch are valued for their Flowers, are most pro-  
perly committed to the Earth, when the Moon is in the Full;  
those, on the other hand, whose Roots we intend for Service,,  
are most seasonably planted during the Decrease of the Moon.  
Wood also cut at the Full Moon, rots sooner, and is less pro-  
per for budding, than that which is cut whilst it decreases.  
This is consumed by repeated Experience, and is taken Notice  
of by *Macrobius* in these Worth: *[Saturn. Lib.* 7. *Cap. use.] :  
if Wood* cut either when the Moon is already in the Full, or. .  
" when it is increasing, is.entirely improper sor building, since  
" it is softened by the too great Quantity of Juice in it ; and  
" Farmers take care to reap when the Moon is on the Decrease,..  
" that by that means their Corn may prove dry.'' The same.  
Author, in the above-cited Part, affirms, thet Flesh carried  
in the Night-time, whilst the New Moon shines, becomes  
putrid and rotten, sooner than other Flesh. He there inquires  
at Length into the Cause of this Pinenomenon,. and .ascribes .  
it to the moist and humid Nature of the Moon.

Without saying any thing more on the Influences of the  
Moon, I now proceed to consider those Powers and Virtues  
which both antient and modern Astronomers have observed the  
other Planets to heve upon the human Boby, especially when  
in a weak and sickly State. And first. *Mars* and *Saturn* are.,  
thought to produce none of the most benign Effects; for when  
either in Conjunction with each other, or with any of the rest  
Of the Planets., the? heve in all Asses been helieved to produce.

various Diseases, and Commotions of the Blood and Humours.  
*Jupiter* and *Fenus,* on the other hand, are thought to he more  
benign Planets ; and many Authors heve affirm'd, that during  
their Conjunction the Body acquires new Strength, and Dis-  
eases are brought to terminate happily. *Mcrcury,* again, has  
always been thought a Planet of an indifferent Nature, and  
to asthme the Qualities of the Planet with which he happens to  
be in Conjunction. That this Planet is principally instrumental  
in promoting the Diseases which arise from Serum, has with  
very, good Reason heen believed. .

But more particularly, they believed certain Conjunctions to  
he either benign or malignant ; thus they rightly enough ima- .  
gined, that the mutual Aspect os *SA* and *Jupiter* was subser-  
vient to the Cure os chronical Diseases, such as the Hypochon-  
driac Disorder and Scurvy. Besides, under this Aspect they  
recommended Venesection, the Use of Purgatives, and other  
Medicines. The Aspects also *Cd Jupiter ζη,ά Vinus, Sol* and  
*Mcrcury,* as also of *Jupiter* and *Mercury,* are said to he salu-  
tary to phthisical and hectic Patients, as also to such aS labour  
under burning and inflammatory Fevers; favourable *Crises* are  
also said to happen under this last-mentioned Aspect. The  
Aspects os *Mars* and *Mercury,* on the other hand, as also of  
*Mars aess&Jupiter,* are bad, since they not only excite Inflamma-  
tions, Spittings of Blood, and burning Fevers, but also portend  
the worst under these Disorders.

The Aspect os *Sol* and *Mcrcury* is savourable to those Dis-  
orders which arise from Phlegm and Serum. But the Con-  
junction of *Mars* and *Sol* is thought to excite Commotions in  
the yellow Bile, and by that means to bring on Inflammations  
of the Stomach, Fauces, and Brain. When *Mars* is in Aspect  
with *Mcrcury,* then People are disposed to the Gout, and to .  
Pains, especially -such as arise from Phlegm, and a too great  
Abundance os Humours. The Aspect of *Mars* and *Saturn* is  
said to be prejudicial to choleric and melancholic People; it  
also excites CardialgiaS, Cephalalgias, Phrensies, and provokes  
the Mind to Wrath, and throws it into preternatural Commo-  
tions. The Conjunction of *Saturn* and *Fenus* portends Danger  
to Women big with Child. It also excites Coughs, Coryzas,  
Gouts, Head-achS, Palsies, and is thought to be in a particular  
manner hurtful to Children. The Aspects of *Vinus* and *Mars .*

\* are. inauspicious to. Women big with Child, and such aS are in  
Labour; and are for that Reason principally to be dreaded by  
them. .

. The Aspects of *Saturn* and *Jupiter,* as also of *Saturn* and '  
*Mars,* are the. inauspicious Forerunners of terrible Calamities  
to Mortals ; for acute epidemical, and even contagious Disor-

1 ders, follow the Conjunctions of these Planets. The baleful  
Effects of the Aspects of these Stars are sussicientiy shewn from  
the Violent Fevers, which aster them have often raged with  
implacable Fury almost over all *Europe. Matth. ’Leifites, in  
Orat. de Cause et Period. Postil. Morb.* has shewn, from many  
Observations, that the Aspects of these Planets generally threaten  
us with an imminent Danger of a Plague. Thus he says, that  
in the Year 1127. a Plague raged with such irresistible Violence,  
that the World was like to heve been unpeopled by it, and that  
the Astronomers assigned the Conjunction of *Saturn* with *fu-  
piier,* aS its principal Cause. *Boccace,* and *Guido de Cauliaco,*have, in their Writings, informed us, that the Aspect of *Jupi-  
ter, Saturn,* and *Mars,* was the Cause of the Plague which  
raged in the Year I 348. And *Marsilius Ficenus,* The greatest  
Philosopher of his Age, assigns the Eclipses of the Sun and  
Moon, and the Conjunction of *Saturn* and *Mars,* as the Cause  
of that which raged in the Year 1478. Thus also the learned  
*Caspar Bartholine,* Professor at *Tubingen in Germany,* from the  
Conjunction of *Saturn* and *Mars,* in the Year I628. after a  
hot Autumn, and mild Winter, in a public Oration there de-  
liVered, predicted the Plague, which for some ensuing Years  
raged almost over all *Europe.* Thus also *D. Paulas de Sorbact,*Physician to the Emperor, accurately predicted the Plague at  
*Vienna,* from a Conjunction of the same Planets. To these  
we may add, what *Daniel Sennerius, Lib.* 3. *Part.* 2. *Sect.* 2.  
*Cap.* 7. has observed, concerning the Epidemic Dysentery winch  
happened in his own Time, in the Years I624. and I637. in  
Consequence of the same Position of these Stars.

How much almost all the Antients ascribed to the Moon, and  
the Various Positions os the Planets, with regard to critical  
Days, .is every-where to be discovered in their Works. Nor  
is it entirely without Reason, though at the same time they  
seem to deserve some Animadversion even on this Head, that they  
ascribe so much, and trust so far, to the Moon, in constituting  
critical Days, exclusively of the State of the Distamper, and  
Condition of the peccant Matter ; for, besides what has been  
already said upon the Head, ’tis agreed upon by the *Litcrati,*that her Aspects with the rest of the Planets are of the utmost  
' Importance. To this Purpose, I shall now quote a memorable  
Passage of *Eichstadius,* concerning critical Days, *Lib.* 2. *Eph.* II.  
." If, says he, the Moon, in the Beginning of an acute Di-  
". stamper, should happen to have no Aspect with the other  
" Planets, but should in the Progress of the Disease come  
" within the Influence of some baleful Planet, either by Con-

" junction. Opposition, or Quartile Aspect; Or if, in the .  
" Beginning of the Disease, she should be exposed to the in-  
"-fluence of malignant Planets, and, in its future Course,  
" also come into malignant Aspects, you shall then see deep  
" Tragedies acted, dangerous Perturbations and Commotions  
Zi excited in the Body, and Very often *Crises,* which prove  
mortal. ,We are not therefore, says the learned Astrono-  
mer *Moebius,* in *Episi. Inst. Med. Lib.* 3. *p.* 3. *Cap.* 8. onlv

" to consider the Moon, but also the Force and Virtues of  
" the other Planets, whose Influences she shall happen to re.  
" ceiVe." .......

..As to the Method, and Form of Practice, and the proper  
Seasons of exhibiting Medicines, the Antients also carefully  
consulted the Stars ; for that Purgatives, or Venesections, used  
rashly, and without absolute Necessity, for the most part, pro-  
duce bad Consequences at the Solstices and Equinoxes, the  
Eclipses os the Sun or Moon, or upon the actual Presence or  
Approach of a baleful Planet, for Instance, Of *Saturn* with  
*Mars,* and their Conjunction with the Moon at the Hour in  
which these are used, is not only found from Experience, but .  
fully demonstrated by that skilful Physician *Frederic Hoffman*senior. *Hippocrates,* in the Passage above quoted, absolutely  
discards the Use of. Medicines about the Summer Solstices.  
Every Surgeon may observe a Fact, concerning which *Lev.  
Lemni us* has given a Caution, which is, that Wounds inflicted  
during the Conjunctions or Oppositions of the Luminaries, are  
more difficultiy and flowly cured than Wounds received at other  
times. In all strumous Cases, Medicines exhibited during the  
Decrease *of* the Moon are more efficacious, than if used at  
other times. Patients who are afflicted with Epilepsies, or la-  
hour under Disorders of the Nerves or Head, ought at every  
Change of the Moon- to use nervous, cephalic, and epileptic  
Medicines, from which they will find no small Relies.: In  
Cases where the Intestines are racked with Worms, the Use of  
AnthelminthicS is most successfully prescribed in the Decrease  
of the Moon. At that Time also Blood is most advantageously .  
taken away ; and this Practice is universally and religioufly ob-  
served by the Inhabitants os *Switzerland,* who are uncommonly  
fond of this Operation. The Physician, who endeavours to  
promote the suppressed Menses, will find his Intentions most  
effectually answered by prescribing the Use of Emmenagogues  
about the New and Full Moons. Three or four small bulbous  
Roots of Garlick are successfully taken by those who labour  
under the Stone, every Week, on the Days immediately pre-Xceding the Four Quadratures os the Moon. See *Pride Hiss-  
man. Clav. Pharmaceut. Schroed. p.* 406. In like manner, when  
large Evacuations by Stool are intended, the Design is best and  
most safely carried on three or sour Days aster or before the Full  
Moon.

Having thus given an Account of the Sentiments Os some  
of the most learned os the antient Physicians, with regard to  
the-Influence os the Stars on the human Body, it now remains,  
that I give my own Opinion in this Point. And, to. he as  
brief as possible, I declare at once, that I am for keeping a due  
and proper *Medium*; I neither attribute too much to the Stars,  
nor absolutely deny their influence and Operations, but am for  
making a due and just Distinction between rational and well-  
founded Astronomy, and that winch is superstitious, sabulous,  
and empirical. It is not indeed to be denied, that upon this  
Head some of the Antients have advanced things, which are  
not only superstitious and fabulous, but, which is worse, directly  
repugnant to Reason, and inconsistent with a DiVine Provi-  
dence; for who, that is not forsaken of his Reason, and de-  
prived of his Senses, can approve of their running to so into- ,  
lerable a Length of Madness, as to determine the Morals, the  
Fortunes, the Diseases, and Deaths of Men, from them? .  
Who, on the other hand, can help lamenting, that the Part  
of Astronomy, which relates to Meteors,. should have been  
hitherto so littie cultivated, as, in a manner, to remain imper- .  
sect, dubious, and even destitute of a due and proper Founda- .  
tion ? And, upon this Occasion, I cannot help contemning the  
want of Accuracy in our Almanacks, which boldly predict cer-  
tain States of the Weather; but the Events rarely agree with  
the Predictions.. By this unlucky Circumstance, several, not  
only of the modern Physicians, but Philosophers, have been in-  
duced to run into the opposite Extreme, and utterly deny every  
the least Degree os Influence or Virtue to belong to. any os  
the Stars, or heavenly Bedies, except the Sun. As an Argu-  
ment for these Opinion, they advance the immense Distance at  
winch they are removed from us. But certainly this Distance  
is not so great as to cut off and destroy their Influence upon  
our Globe ; for, if it does not hinder the Influx of the *Light*upon our Eyes, it cannot, *a fortiori,* prevent its Action upon  
our Atmosphere, since it is interposed between us and them.  
Besides, Who can be *so* miserably hoodwinked, as not plainly  
to perceive and confess, that the wonderfully regular Motions  
of these Planets, them regular Progressions, and stated Con-  
junctions, were by Heaven, whose Designs are always Vast in  
. themselves, and beneficent to Mortals, intended to answer  
some noble and important Purposes ? Nor indeed can the so

surprising Variety of Weather and Seasons he easily accounted  
for upon any other Hypothesis than the different Operations and  
Influences of the Stars, in Consequence of their various Situa-  
tions and Positions. The Effects, 'tis true, of the Sun, are  
so evidently felt, that the Man must be somewhat more than  
Sceptic, who can deny them ; but yet Its influences are by no  
means sufficient to account sor so surprising a Diversity of Sea-  
sons ; sor we frequentiy find one Winter mild and gentie, an-  
other excessively cold and inclement; one Autumn dry, an-  
other rainy ; one Summer the Ground is refreshed with frequent  
gentie Showers, and in ano tiler it is parched with continual  
scorching Heat. The Winds also do not always retain the fame  
Qualities, nor blow from the same Quarter; but alter both,..  
accordingly aS they are influenced by the Stars. Those which  
blow from the North, are Ordinarily accompanied with a  
piercing Cold ; yet,, which is surprising, they sometimes lay  
aside their Inclemency, and are observed for a considerable time  
to blow in a mild, and gentie manner. And Easterly Winds,',  
which generally bring Rains,, are sometimes also, attended with  
clear and serene Weather.

But this influence os the heavenly Bodies, is placed beyond  
the Reach os Uncertainty or Doubt, when we consider, that  
the State of the Air is Very much altered under the Aspect of  
two Planets. Though indeed we cannot predict and determine  
this Change in the State of the Air with that Accuracy and  
Exactness we could wish, yet we justly assert the Fact, since  
Experience adds her sacred and uncontroulable Sanction to.it.  
I cannot, on this Occasion, forbear commending the Industry  
which Mr. *Cooh, an Englijhman,* and Mr. *Schlitters,* have .  
used in this Affair, who, aster long and accurate Observation,  
at last sound every particular Clange of the Air to be produced’  
by the Situation of the Planets. I myself, for ten Years, care-  
fully made meteorological and barometrical *Ephemerides*; and  
every Day frequentiy observed the Weather, the Changes of  
the Winds, and the Height *of* the Mercury in the Barometer.  
During the Course *os* these Observations, I can, without transe  
grossing the Bounds of Truth, affirm, that the Aspects of the  
Planets, especially the superior ones *Saturn* and *Jupiter,* as also  
of *Mars,* whether with each other, or with other Planets, are  
invariably followed with certain and unavoidable Commotions  
of the Air,, especially if several of these Aspects should happen  
at one and the same time. '. ... -. -.

There is no Occasion for proving by a long Train of Argu-  
ments and Observations, that Changes of the Weather happen  
about the Quadratures of the Moon, since that Fact is well  
enough known to the meanest and most ignorant of the Coun-  
try People. But the Influence os the Moon on our Globe is,  
in my Opinion, remarkably consumed by the Flux and Reflux  
of the Sea, a Phaenomenon ascribed to the Changes of the .  
Moon by the concurring Suffrage of all who know any thing  
of true Philosophy.

. There is, then, an Influx of the Stars upon our Earth, and  
that too so sensible and manifest, that it cannot be denied by  
any one,, who allows himself to observe the Alterations pro-  
duced in Vegetables and Animals, by the Positions and *Phases*of the Moon. And I could heartily wish, that this. Branch of  
Learning were more carefully cultivated and improved by a  
sufficient Number of Observations made in different Places at  
one and the same time, lest, for want of these, the Good to  
he expected from Researches of this Nature should be stifled  
in its Infancy. This may be hest prevented by a sufficient Num-  
ber os accurate Observations made in different Places, at one  
and the same time, not only on the State of the Weather and  
Air, but alsoOn the Winds, the Height of the Mercury in the  
Barometer, and the Degrees of Heat and Cold in the Thermo-  
meter. For this End, our- new-invented Thermometer is well  
calculated, by which, though but one Machine, we not only  
discover the least Changes os Heat and Cold, but also the pre-  
cise Proportion in which.they are in the Air, without, any In-  
fluence from the Weight of the Air, which is not the Cose  
with other unsealed Thermometers.. .... .

- Is, then, the Stars have an Influence on our Earth, as they  
undoubtedly have, it will be no difficult Task to shew, that our  
Bodies must be subjected to very considerable Changes and Al-  
terations in Consequence, of such an Influence; for he must be  
utterly ignorant both of Physic and Philosophy, who is unac-  
quainted with the Force and Action os the Ain upon our Bodies.  
The Air is of all the other Elements most necessary to us ; by  
its means. Respiration, in which Lise immediately consists, is per-,  
formed. By it the *Anima Materialis,* aS it is called, is nourish-  
ed and supported; and by it that divine and heavenly Part of  
onr Composition, called the *Soul,* is kept united with our Bo-  
dies. The/ἐν acting by its Elasticity on our Bodies, and their  
Humours, is deservedly celebrated as the *productive Cause* of  
the Motion of the *Fibra Matrices* of the several ’Muscles.  
The *Air* conveys a due Strength and Tone to the Solids, which  
maintain and carry on the Circulation of the Blood. *The Air*hy its Weight and Pressure preserves the several Humours of  
onr Bodies in a due *AEquilibrium,* lest, being expanded bv their

too quick and intense Motions, they should interrupt the ne-  
cessary *Systole,* or Contraction of the Vessels. In fine, a  
Change of the *Air* is by *Hippocrates [Lib. de Flat.]* affirmed  
to he the Cause of the most terrible Distempers. Witness *Epi-  
demical Diseases,* by which such a Number of Mortals are hur-  
ried into the other World, and winch arise from no other Cause,  
than the Malignity of the Ain; for the Circulation of the  
Blood, *ccrlcris paribus,* bears a direct Proportion to the Stare of  
the Air; and Health bears a direct Proportion to the Circula- .  
tion of the Bloed. A serene and temperate Ain contributes to  
carry on the animal Functions with Ease and Tranquillity, and  
renders the Body sound and Vigorous. A gross and dense Air,  
on the other hand, renders it weak and languid, by injuring  
the Excretions : Hence, the Tone of the Fibres being impaired,  
the due Motion and Circulation os the Blood is disordered and  
disturbed.

For this Reason the great *Hippocrates,* every-where in his  
Writings, insists upon the Ain and its Properties. And, which  
is still more, from a. diligent Observation of the preceding Sea-  
son, he so accurately predicts the Constitution of the ensuing  
Year, and the Diseases that will rage during it, that his Pro-  
dictions seem to carry something of a divine and infallible Na-  
ture in them. His incomparable Book *de Aere, Locis, et Aquis,*as also that *de Flatibus,* are well worth the Perusal os those who  
want Satisfaction on this Head; since his Industry, and extensive  
Skill, of which he has given numberless other Proofs, no-where  
appear more confpicuoufly, than in these Performances; for  
he was the first who raised this Doctrine, as it were, from a  
State of Non-existence, and exalted it to a Branch of Physic,,  
which is not only curious in itself, but beneficial to Mankind.  
And it were to be wished, that more had trod in his Steps, and  
used their highest Care and Industry to enrich this Branch of  
Learning with a sufficient Store of accurate and well-made  
Observations. The Words of this divine Author, in his Book  
*de Humoribus,* contain an Observation os such Importance to  
Physic and Mankind, that they richly deserve to be written in  
Characters of Gold. *Such as the Weather and Sea sms are,  
such will the Diseases and Constitutions arising from them be.* If  
the Weather is seasonable and naturas. Diseases which readily  
arrive at a Crisis are produc'd. And the Diseases peculiar to .  
particular Seasons are subject to Alterations from the Variety  
of these Seasons. .. ..

From what has been said, every one must plainly perceive, ,  
that since the Situations and Positions of the Stars induce  
Changes and Alterations on our Atmosphere, they must of.  
consequence affect our Bodies with Various Changes. Nor is  
it to he doubted but they act on our Minds, and variousiy affect  
the Genius and Dispositions of Men 4 for every judicious and  
skilful Physician is well apprised, that the Temperament and  
Motion os the Bloed give a particular Turn to the Mind, the  
Morals, and tlje Genins.. But that the *Soundnes.s of the Body*depends upon the Air, which is influenc'd and acted upon by  
the Stars, is a Point already so clear and undeniable, that in  
stands in need of no Proof. And, indeed, I am inclin'd to..  
think, that the Antients were by this induced, not only to ascribe  
to the Stars an Influence over theBody and the Mind, but also.,  
from them superstitioufly to predict the Fates of Men, and'  
the lucky and unlucky Events, of Things. In this they were.,  
wrong, and their Error is justly censurable as superstitious and  
trifling.

But though, by reason of our limited and shallow Capaci-,  
ties, we cannot comprehend the real and actual Manner in which  
this Influx is performed,, yet this Circumstance ought not to  
shake and invalidate a Fact, to which Experience gives her daily -  
Suffrage ; for how. many Phaenomena are there, both in Me-.  
dicine and Natural Philosophy, for which , we cannot account,  
but which, at the same time, leave no room in our Minds for  
Doubt, *Scepticism,* and Uncertainty .? Besides, 'tis a Maxim  
in Philosophy aS just aS 'tis old. *That from our. Ignorance of  
the* MODUS, *or, as the* Greeks *exprese it, from the 76 dalumi.  
or Manner of Existence, to the. Th ore, or real Existence, thcrae  
arises no just Conclusion.* But it seems worth while to make.  
at least an Attempt to remove this Doubt. The Manner, then,  
in which this Influx is made, seems to be by *Rarefaction,  
Compression, and Direction of Motion in this or that Line.*

Thus *Saturn* seems to .act upon our Bodies, and the At-.  
mo sphere, by compressing the Air, and giving its Parts a recti-'  
linear Direction in their Motion, by winch means Cold and  
Winds are produced. *Sol* and *Mars,* if we may indulge  
Conjecture in a Point so littie subjected to our Senses, produce  
a Vertical and intestine Motion in the Particles of the Air, the  
natural Consequence os which is *Heat.* But *Venus* and the  
*Moon,* by rendering the Air lighter, lay a Foundation for Store  
*os Vapours* being raffed, and are therefore sound to occasion  
rainy Weather. The Moon at her Quadratures rarefies the  
Air too much. Hence our Bodies and Juices hecome turgid,  
and our Transpiration is too great. At New Moon again,  
or an Eclipse os the Moon, the State os the Air is compressed,  
a. Circumstance which excitess Various Disorders

The most noble Of all the Planets, and that which most con-  
tributes th the Support ofthe Body, is the *Sun,* whose Efficacy  
in the Preservation of Health is so conspicuous, that the An-  
tients ascribed a Power of curing Diseases to it . herarrse they  
observed,' that the gentie and temperate Heat of the SIm had a  
Tendency to remove and carry off all Distempers ; for *Apollo,*the God who presides over Physic, is the same as tho Sun. For  
this Reason he was, according to *Macrobius,* styled *Sospitalis  
ac Modicus Deus, The God vtho procures the Safely, and pro-  
tects the Health of Mankind*; and had alsoDivine Worship paid  
it by.the Heathens on this Account.

The Conjunction of 5oZwith *Joepiter,* of *s.apiter* with *Venus,*as also the Aspect os *fupitcr* and *Mcrcury,* are particularly  
. beneficial in removing those Disorders winch arise from Spasms,  
and spasmodic Constrictions of the Fibres. For this Reason  
they are propitious Planets to hypochondriac, hysterical, phthi-  
steal, and inflammatory Disorders ; for, by rendering the At-  
mosphere light, they relax the Tone of the Fibres, and pro-  
mote the Transpiration of the impure and recrementitious  
*Sordes* lodg’d in the Body. For this very Reason also, under  
the Conjunction of *Sol* and *siapiter,* all Attempts to restore and  
preserve Health, whether by Venesection, Purgatives, or other  
Remedies, are most proper. ..so '

The Aspect of *Sol* and *Mercury* is of Service to phlegmatic  
Disorders, and such as draw their Origins from Serum. The  
same Effect is also produced by the Aspect of *Sol* and *Mars,*which, on the other hand, is prejudicial and hurtful to the Cho-  
leric, ' whilst it too much increases the intestine Motion of the  
Blood, and by that means produces bilious and hot Diseases,  
especially Haemorrhages. The Conjunction of *Mars* and *Mer-  
cury* -produces almost the fame Effedts. .

. The Aspect of *Fenus* and *Saturn,* by compressing the Air,  
renders The Fibres tense, blocks up the Pores, and prepares and  
disposes the Body to. Spasms, Rheumatisms, Fevers, Coughs,  
Coryzas, and Abortions. The Aspect of *Mars* and *Saturn,*by throwing the Blood into internal Commotions, and oh-

.structing.external Perspiration, disposes to Anger, and excites  
unbridled Passions. The same Aspect promotes the Diseases  
arising from Bile, and for that Very Reason uses to pave an  
easy Road to Putrefaction and the Plague. The long-conti-  
Uued Aspect of *Vinus* and *Mercury,* by rendering the Atmo-  
sphere lighter than, it ought to he, disposes to Ulcers, putrid  
Diseases; Worms, *Aphthae,* and catarrhous Fevers. The  
Aspect also of *Saturn* and *Japitcr* produces a Train of fatal  
and melancholy Effects ; for the Aspect of *Jupitcr* rarefies the  
Humours, whereas that of *Saturn,* by an external Pressure  
upon the Body, hinders Perspiration. ..

I have already said, that, during the Increase of the Moon,  
Tumors were inlarged ; and this happens for no other Reason  
than this, that the Moon, not only by her Rarefaction, but  
her Humidity, relaxes the Tone of the solid Parts: Hence Per-  
spiration is interrupted, and an Accumulation os Humours,  
Blood, and Serum,' ensues. But, upon the Decrease Of the  
Moon, the Perspiration acquires new Force and Strength, by  
which means the Tone and Elasticity of the Fibres are restored  
, and augmented. For this Reason People at this Season receive  
the most considerable Advantage .from the Use of Medicines ;  
for then Evacuations of all Kinds, and Venesection, that great  
Preservative, are more proper, and more beneficial to the Con-  
stitution than at other Times. ' ς

ς. That- we ought to abstain from the stronger Purgatives  
.during the *Solstices,* is evident from this, that, during the  
Summer Solstice, the Strength is dejected, and the Spirits  
languid,. in. consequence of the Violent Heat. The Winter  
Solstice, on the other hand, is -always accompany'd with the  
freatest Imbecillity, and Nature is then at her lowest Ebb.

ince also the Equinoxes, in consequence of their Humidity,  
.relax the Fibres, they must of Course, retain within the Body  
the Humours, whose Expulsion and Elimination are attempt-  
ed.. For this Very Reason, is about the Equinoxes the more  
.Drastic Purgatives are used, it readily happens, that the Humours,  
being by their Violence forcibly driven to particular Parts, ex-  
cite dangerous and fatal Stagnations ; for winch Reason the  
Physician is at these Seasons to he particularly careful never  
to prescribe these strong Purgatives, but rather make Choice of  
the mild and gentiy operating Laxatives, in the Decrease of  
the Moon, such Medicines as are designed against Worms and  
Tumors, are most properly used; because at that Time Nature  
being in her most flourishing State, increases their Operations,  
.and proves an excellent Assistant to them ; and the more pow-  
erfully Medicines are assisted by the concurring Forces os Na-  
ture, the more speedy and successful their Operations will he,  
and *vice versa-*

But it is above all things to he rememhePd, that the Influ-  
ence of the Stars is to he rank'd among those Causes of Dis-  
eases only, which affect our Bodies, whether in a sound or  
Valetudinary State, in a remote and secondary manner ; for  
the Stars only dispose to particular Disorders, and particular  
States of the Body and Fibres;- but they are not the proximate  
. and immediate Causes producing the Disorders themselves.

The Maxim of the AntientS relating to this Particular is Very  
justs when-they say, that the Stars indeed *inclin'd,* but could  
not *necessitate.* In order to produce a necessary Effect, a proxi-  
mate and immediate Cause is necessarily requir'd; but, in order  
to produce anyEffect, many remote Causes must concur. It  
must also he remember'd, that the Stars act upon our Bodies  
not *secundum modum. activitatis,* or merely by their own Vir..’  
tue and Energy ; but *secundum modum Receptivitatis,* or ac-  
cording to the State and Disposition of rite Objects on which  
they act. This Observation is on this Occasion so much the  
more carefully to he adverted to, as it ought to he fixed and  
riveted in the Mind, with regard to all morbific Causes what-  
soever, the Effects of Diseases, and the Operations of Medi- '  
cines. For this Reason we observe, that all Bedies are not  
affected in the same manner by the Stars, but the same Effect  
which proves heneficial to one, sometimes proves hurtful, and  
injurious to another. Lastly, 'tis not to be forgotten, that the  
Influences os the Stars are most. conspicuous and percepti-  
ble in valetudinary and infirm Constitutions.; sor these, in con-  
sequence os their lax and spongy Habit os Body, and the too  
languid Motion os their Blond, are in a particular manner  
expos'd to the baleful-influences they diffuse, whereas those of  
a more hardy and athetic Make, are not easily injur'd by  
them.

in the last Place, this is to he duly remember’d, and care-  
fully adverted to. *That, in Cases of* **URGENT NECESSITY,***neither the Position of the Stars, nor the State ofthe Atmosphere,  
arc to be regarded ’,* for no Physician ought to recede from  
what he thinks a rational Practice in acute Diseases, because  
the Aspects and Positions of the Stars are bad, according **to**the Advice of that ikilful Physician *Leuinus Lemnius.*

Thus in a Quinsey, Pleurisy, and inflammations, we are **to**disregard the Stars, but have immediate recourse to Vene-  
section : For as the ikilful Pilot, on the . Prospect of an ’ ap-.  
proaching Tempest, loses no Time, but struggles for Life and  
Safety against Wind and Tide,, till, by a prudent Management  
of his Sajis and Oars, he has brought his Ship to a secure Sta-  
tion, where she may be shelter’d from the Violence of **the**raging Winds; and Billows; just so the ikilful Physician, neglect-  
ing the Stars, and their Influence, has recourse, aS soon as pos-  
sible, to such Medicines as remove the Violence os the Distem-  
per, and place the Patient beyond its Reach. *Hoffman.*

ASTRUM, ἄστρον. The same as άστῆρ, a Star.

*\* Asirtem,* with the ChymistS, signifies that Virtue and Power  
which accrue to Things from their Preparation: Thus the *Ase  
trurn os* Sulphur is its Kindling, by which it is changed into **a**most excellent Oil; and the *Aitrum* Os Salt is its Resolution  
intoWater or Oil, by winch, in like manner, it acquires greater  
Strength. *Ύ\ά Astrum* of *Mercury* is its Sublimation, by winch  
it acquires a wonderful Force and Power, of more Extent and  
Subtilty than it was endu'd with by Nature. It is otherwise  
called *Alcol, quinta Essentia, Extractum, Spcrma,* &c. *Ru-  
land. Johnston.* There is also the *Astrum Solis arel Auri, Lunce, rice. Astrum ex Igne* is burning like Fire, arid making a Vehe-.  
Inent impression. *Dict. Paracelsicurni*

*, Asirum* is also a Name given to certain Medicines, as Tro-  
ches, or those in the Figure of little round Cakes, impress'd  
with an Asterisk. Hence we read in *Galen, Lib.* 8. *deC. Me  
S.L. Cap. p.* and in other Places, of the invincible, somnise-  
**rous,** anodyne *Astcr.* And with some ChymistS a Remedy  
bears that Name, not so much on account of the Impression,  
as its extraordinary, and, I may say,' *Astral* Virtues; for Ek-  
ample, the *Astrum* of Serpents.

ASTUR, in *Aldrtniand. Ornithol.* is the same as ACC1PI-  
ΤΕΚα

A SUB. The Galaxy. *Ruland. Johnson.*ASULCL Lapis Lazuli. *Iidern.*ASUOLI. Ink, Soot. *Lidern.*

ASYMPHOROS, ἀσίνμφορος, from aNeg. and συμφοραὲ, a  
Calamity, Misfortune ; not detrimental or dangerous. Thus  
*Lib.* I.- περὶ δικότης\* καὶ *lumi fygrAifers qkaeypliArii* καὶ ἀσυμφόρ»  
. μαίνονται, " after a short inflammation, which was no way

" dangerous, they grow mad."

ASYMPHYTON, ἀσύμφυτεν, from α Neg. and σύμφυτος,  
concrete, coalescent, in *Hippoc. Lib.* περὶ τέχνης, signifies  
whatever is disjoin’d by Nature, and not continuous.

AYSMPTOTON, ἀσύμπέωτον, from α Neg. and σήμπέωτος,  
of συμπιπέω, to fubside, to he compressed, or contracted. Un-'  
compressed, uncontracted. Ἀσύμάωτον, in *Hippoc. Lib. rsied  
XupeZv,* denotes what is not contracted or compressed thro' Dry-  
ness. In *Gal.L.s.adGlaus.* άσὓμπέωτος ή πᾶσα ἐξις τή σώματι,  
" the whole Habit of the Body keeps up without sinking, \*'  
was before expressed by οῦδέ ὁ σίν σώματος ὁγκος συμπἐπέωκεν,  
Ἀ nor was the Balk of the Body sunk or contracted. '' Thus  
σήμἠῖωσις. *Lib. eacci yytpeuv,* signifies a Sinking or Contractinn  
of the outward Limits of the Body . and *Aph..* 3. *Lib.'s.  
foe prist capies* are called κενῶοιες. Evacuations, importing fuch  
Compressions to he the subsiding of the Vessels upon Eva-  
cuation.

ASYNETHES, ἀσυνήθης, from α Neg. and συνήθης, custo-  
foary; uncustomed. *Hippoc. Lib. sts. Aph.* 49, 50.

ATAC, Talc, or Nitre. *Ruland. Johnson.*

ATACTOS, άτάκίως, from α Neg. and τάξις, Order,  
Disorderly, irregularly. An Adverb often used by *Hippocrates,*in Conjunction with πεπλανημένως, " after a wandering man-  
" ner. " Thus, for Instance, *Lib.* I. *Ep. fepoa* o πέιον  
ἀτάκτως καὶ πεπλανημἐΓως ἐγένοντο, "all had Shiverings in a  
" vague and irregular manner. "

ATA MARAM, H. M. *Pomifera Indica, Fructu concede  
fquamos.o viridi.* The same as AHA ΤΕ DE PANUcHO REC-  
CHI, which see.

ATANOR. A Pot perforated. *Ruland. Johnson. \*

ATARACTOPCESIA, ατςχραὰταποιησία, from α Negat,  
γαρακτός, troubled, and Ηοιἐω, to do. The performing an  
Action with an undisturbed and intrepid Mind, becoming a  
Physician. *Hippoc. 'uoci evyeyp...*

ATAXIA, άταξία, from α Neg. and τάξις, Orderi Irre-  
fularity. in a special Sense it signifies the Disorderliness and  
rregularity in Crises and Paroxysms os Fevers, *Hippoc. Lib.* I.  
et 3. *Ep.* A Pulse is said to be ἄτακτος, irregular, when it  
observes no Order in the Time or Tone of the Strokes ; and  
an erratic Fever is called ἄτακτος, or ἄτυπος, which keeps no  
certain Character or Order in its Periods.

ATAXMIR. An *Arabic* Word in *Alsiucasis,* signifying the  
Method of treating an Eye when preternatural Hairs grow  
under the natural ones on the Eyelids, and incommode the  
Eye. *Castellus.*

ATEBRAS, *uncus aquinus,* that is, a Subliming Vessel.  
*. Rulandus.*

ATECHNIA, ἀτεχνίη, from a Negative, and τέχν», an  
Art. Want of Art. Τουτ« si ἔγωγε φημα ατεχνίην ειναι, βπ»  
’ μήτε ὸνθὸν ἔιη μηδὲν, μήτε ουκ ἐρθόν. " I assert that to be Void of  
" Art, in which there is nothing right, and nothing wrong.”  
*Hippoc. xiei* τέχνης.

ATENES, ἀτενἐς, fix'd, immoveable, rigid. Thus ἀτενὲς  
ομμα is a fix’d and immoveable Eye, a rigid Aspect. *Galen,  
Comm.* 3. *in Prorrhet.* explains it by θρασὑ, held. Vehement,  
a fierce and wild Aspect, which portends aPhrensy. Ἀτενἐως  
Οκλάμπουοςν ὀφθαλμῶν *iC the* Eyes are fix'd, and shine," which  
is a Sign of a Delirium. *’Afasilsula opepedla. Eyes* fix'd, intent,  
looking earnestly. *Lib. ζ. et* 7. *Epid.*

ATER SUCCUS, or ATRA BILIS, ure sometimes used to  
express-the *Black Bile, Melancholy.* SeeBILIs, and MELAN-  
**CHOLIA. ;**

ATERAMNA, ἀτέραμνα, in the following Passage of *Hip-  
pocrates, Lib. de Acre, Sacis, et Aquis,* διὰ τὰ *uJsisa orsa  
vRMtass Τί* καὶ ἀτέραμνα, καὶ ψυχρα» is expounded by *Galen* in his  
*Exegesis,* by τὰ δ.υσκἀτἐργαστα καὶ σκληρά, " difficult of Con-  
" coction, and herd in which Sense the Place quoted will  
he render'd, " because the Waters are hard, and difficult of  
" Concoction, and cold.” The same Author, *Sam. in  
Lib.* 6. *Epid,* writes, that some of the Antients call'd bad  
Waters ἀτέραμνα, and ἀτεραίμονα. And in another Place,  
*'Comm, eodem,* he telis us, that Rain-water was hetter than  
what sell with Hurricanes, which could neither he digested nor  
alter'd,' but was like the Water of some Fountains which the  
Antients call'd ἀτεραμνώδ». These Words import as much as  
*untarneable, indigestible. (* S; . .Τ. ... ...

Ἀτέραμνοι κοιλίας, *Libi de Acre, Libis, et Aquis,* are hard,  
dry, stubbornTIellies, not lubricous or mollisy'd, and opposed  
to ὸυροωτεραι. " such aS are more fluid, or loose. . Ἀτεραόμνοις,  
in the same Treatise, is expounded, by *Erotian,* δυσμεταλλή-  
τοις, " difficult of Alteration.” Ἀτεραμάη there also signifies  
Crudity, and Difficulty of Concoction ; but when transferr’d to  
the Mind, it denotes an untractable Nature, a refractory Dis-  
position, and rough and uncivilized Manners, incapable *of* bring  
polish'd or soften'd. *Hippoc.* ἐν πα^μγγελίαις. Τάστ *so, Z crgiii  
ehat,* ἰητρὶς *insuati ntisti n* “ The true

" Physician will undoubtedly perform his Office with Honour  
" and Conscience, rather than by hard and rough Treat-  
" ment." . ...

ATERES, ἀτηοὴς, from ἄτη, Loss, Mischief Noxious,  
detrimental. *Hippecr. Lib. de Acre, Locis, et Aquisso* El *foeflOl,  
nsictpeoi flov flo dliarctr,* τὰ fl ῦδατα κρηνάῖά τε καὶ *adustpea* πένοιεν,  
άζ οδώδεα, ἀνάγκη τὰ τοιαῦτα τῆς γαστρος ἀτηρέα. ειναι καὶ  
σπλενός. " But if there he no Rivers, and they drink of stink-  
iC ing and stagnating Springs, such Waters must of necessity  
" he pernioious to tho Belly and Spleen." ,

ATHAN ASIA, from α Negative, and θάνατος. Death  
*sImmortaliiy).* An Antidoto which *Galen* describes in the  
eighth Book of his Topics, as a Medicine for Infirmities of the  
Liver, the Gravel, and the Yellow Jaundice. It is thus pre-  
pared : \* . ...

. Take of Saffron, . two Drams ; Cinnamon, one Dram ;  
Spikenard, two Drams ; Cassia, Myrrh, Juncus odoratus,  
of each one Dram: Make them into an Electuary with  
Honey. Taken to the Quantity of a*Grecian* Bean, it  
provokes Sweat plentifully.

There is another Antidote of this Name, which *Paulus, Lib.  
J.* ascribes to *OTibasius,* which takes in all the Ingredients of  
.the former, hut Varies the Proportions, with an Addition of  
Opium ; which, he fays, is a Lenitive of Pain, and proper for  
the Pleurisy, and would have it supply the Place of *Phelonium..*

*'Adar curia.* signifies also the Collyrium άδηκτον, describ'd by *At-  
tius, Lib. J. 'treed also eij'iuarar* καὶ λευζῶν κολδ-υρίων, that is, of  
white and mild Collyriums. *Gorraeus. -*

*Athanasia* is also a Name given to many Compositions in  
some foreign Dispensatories, one of which is in the *Augustan. -*

*Athanasia,* according to *Plancard,* is a Name sorTANA-  
CETUM, which see.

ATHANATOS, according to the last-named Author, is  
**the LYCHNIS CORONARIA, which see.**

ATHANOR. This is, by *Lemery,* deriV'd.from *T.annaron,*an *Arabic* Word, winch signifies a Furnace.

It is a sort of Furnace, contrived in such a manner as to  
keep up an equal and gentie Heat for any Length of Time, by  
only supplying it every twenty-four, or sometimes every forty-  
eight Hours, with a proper Quantity of Coals. - It is very use-  
ful in Operations where a long-continued gentie Heat is re-  
quired.

ATHARA. SeeATHERA.

AT HARES, άθαρῆς, from α Negative, and φθείρω, to cor-  
corrupt. Uncorrupted. This is an epithet sometimes apply'd  
to a Virgin ; and sometimes to Iron, with regard to uts Hard-  
ness, Incorruptibility, or Invincibility.

. ATHELXIS, ἄθελξις, from ἀθἐλγομαι, to suck, or drain  
by Milking. Suction, or that Attraction which is perform’d by  
sucking or .milking. The Veth ἀθἐλγομιυ is used by *Hippo-  
crates, orcci yylenr,* and ἄθελξις, in the Treatise περὶ ἄρθρων.  
but the best Copies, as *Foesius* says, for ἄθελξις, read ἄλθςξις,  
winch he himself approves, and renders *Sanatio,* a Cure.

ATHENA, ἀθηνα, is a Plainer commended by *Asclepiades,*and describ'd by *Oribastus, Actius,* and *Paulus:* It is thus  
made:.

Take of Cadmis, twenty Drams; of burnt Brass, Bark of  
Pomgranate, Galls, long and round Birthwort, Sal Am- -  
moniac,. Squama .ZEris, round and scissile Alum, Orris;  
Misy, Chalcanthum, Chalcitis, - Verdegrise, Aloes,  
Myrrh, Frankincense, Gum Ammoniac, Galbanum, cache  
thirty Drams; of Wax, Pitch, each one hundred, or, as  
Others, two hundred Drams; of Colophony, four hun-  
dred Drams; of Oil, six Ounces. . - - -

... ... \* . . -

This is *Oribasiusts* Receipt ; hut *Asclepiades* prescribes - .

Twelve Drams of Aloes, as many of Myrrh, and sixteen.

Drams Of .Gum Ammoniac: Pound the dry ingredients

. ser several Days together in the Summer's Sun ; then melt  
. those which are liquifiable, and incorporate them with the  
others.

It is very effectual in Wounds of the Head and Nerves, and  
is reckon'd thy *Paulus* among the ἔμμοτα *atippoaRa,* Remedies  
spread upon Lint or Linen, and thus introduced into Wounds  
or Ulcers.. .

.ATHENAEUsh . , ι . /-

*Athenaeus* was the first Founder of the Pneumatic Sect, and a  
Native of *Adtalia.* There were several Towns of this Name;  
but it is most likely, that *tdcaeA.ttalia* which gave Birth to this  
Physician was .a .City, of- *Cilicia,* hecanse *Caelius Aurelianus  
[Acvtor. Lib. L. Cap.* r.j mentions one *Athenaus* of *Tarsus,*who is probably the dame ; sor *Lars.us* being also a City of the  
Province of *Cilicia, Caclius* might have, very probably, put the.  
one sor the other.

This Physician appear'd after *Themison, as* we may gather  
from a Passage of *Galas,* where .he says, that one *Magnus,* a  
Follower of *Athenaus,* had composed a Book, intituled. *Things  
disoovguldsince the Tome* nfeThemison. 'Tis Very probable, that  
*Magnus* composed this Book with no other View than to give  
an Account of the Innovations his Master had made in Physic.  
The Silence.of *.Celsius* and *Pliny,* with regard to *Athenaus,* are  
also a Proof, that he did not live, or .at least was not known, in  
their Days , since ryis .probable, that, having mentioned other  
*imwaators in Physic,* they would not have forgotten him. It is  
indeed,possible, *thzt.Athenaus ussiest* not have made his Appear-  
ancein the Worid in .the Tame os *Celsus,* .who lived under An..  
*gustus* and *Tiberius* sor *Pliny,* if we consider, first, that

there were about fifty Years between him and *Archigenes,* the  
former having written under the Emperors *Nero* and *Vis.pasian,*and the latter, at the farthest, under *Adrian* 7 and secondly.,  
that *Archigenes* was the Disciple of *Agathinus,* who again was  
the Disciple *DLAikenaeus y* we shall find, that this last must .have  
lived ax least fifty Years after *Archigenes,* and consequentiy must  
have heen -contemporary with *Pliny..* If. this Representation is  
j ust, as we may suppose *Pliny* to he a littie older than *Athenaus,*and to write hesore bins, we have no Reason to he surprised,  
that *Acheneeus* ts mor-mernisnsa by him.

AS for the Philosophical Opinions of *Achenaus,* he did not  
believe, *[Galen. Introduct. feu Medicus, Cap.* 9.} that the  
Fire, the Air, the Water, and the Earth, were true Elements;  
for he only gave the Name of Elements to the primary Quali-  
ties of thefe Bodies, that is,, to Heat, Cold, Humidity, and  
Dryness; the two former of which were, according to him,  
efficient, and the two latter material Causes. *Athenaus* added  
a fifth Element, which he call’d *Spirit*... He imagin'd, that this  
*Spirit* penetrated all Bedies, and preserved them in their natural  
State. This Sentiment he borrow'd from the *Stoics* ; and 'twas  
probably this which induced *Galen* to call *Chrysippus* the *Stoick,*the *Father of the Pneumatic Sect. . - .*

This Opinion is also hinted at by *Virgil, \AEneidos, Lib.* 6.J  
in these Words: . :

*Principio Caelum, ac Tcrras, Campofq-, liquentes,,  
Lucentemq, Globum Luna, Titaniaqy astra.  
Spiritus intus alit : totarnq-, infusu per Artus.*

*Meus agitat Molem, et magno fe corpore miscet.*

*Athenaeus,* applying this System to Physic, would have all Dis-  
eases to proceed from the *Spirit suffering,* or receiving, the first  
Assault, τούτου πρωτοπαθοὑ/ος, that is, πνεύματος *[Galen. In-  
troduct. Cap.* 9.]. But as the Works of this Physician heve not  
reach'd us, we know not particularly what he meant by this  
*spirit,* nor whet he understood by its *suffering t* Only from his  
Definition of the Pulse we may conclude, that he helieved the  
*Spirit* to be a Substance capable of Dilatation and Contraction.  
" The Pulse,- said he, -is-no more than a Motion produced by  
" the natural and involuntary Dilatation of the Spirit con-  
" tain'd in the Arteries and Heart; which Spirit, moving of  
" its own Accord, moves at the same time the Heart and Ar-  
" teries." ' - . '

Tins is all we know concerning the Sentiments of *Atheruaeus,*except some things relating to Anatomy, in which he follow'd  
*Aristotle. Galen [de Different. Puls. Lib. An Cap.* 4] observes,  
that none of the Physicians of these Days had written so univer-  
sally on Physic as *Athenaeus*but of all He wrote we have,  
nothing remaining, except two or three Chapters in the Col-  
lections of *Oribasius,* from which we learn nothing that can  
explain this Opinion relating to the *Spirit,* much less any thing  
.that can discover its Use with regard to the Practice of Phy-  
sic. ' - . -i'--. .

ATHENATORIUM, a thick Glass Cover, which is in the  
*Theatrum Chymicum, Vol.* 3. *p.* 33. directed to he luted to a  
Cucurbit, when the Alembic is taken off, in a particular Pro-  
cess there describ'd. .. . -. - - .

ATHENIONIS CATAPOTIUM. The Name ofa Pill  
*in Celsius, Lib.* 5. *Cap.* 2.5. which is recommended against a  
. Couch. It consists of Myrrh, Pepper, Castor, and Opium.

ATHENIPPON. -The Name of a Collyrium, .describ’d by  
*Scribonius Largus,* 26. which is alsh call’d *Dias.myrnes,* said to  
be ufesal in some Distempers of the Eyes. -

- ATHENIPPON- PANCHRESTON, ἀθήνιππον πάγχαι-  
στέν, a Collyrium in *Galen. Lib.* 7. δἐζ κατὰ τόπους, quite dif-  
ferent from that *CA Scribonius Largus,* whence it-appears, that  
the Name *Athenippon was* common to-many Collyria. --

ATHER, -ἀθιψ, *as Galen* says, signifies, in *Hippocrates,*both the prickly Part or Beard of Barley, as in *Lib. o.. de Mor..  
Us,* and also the Top of that Part in the Point of an Arrow,  
which is called the πώγόσν. Beard, aS in *Lib. 5.* ἐπιδημιῶν.  
. ATHERA, ὰθήρα,-or *Athara,* as it is read *in Pliny, Libi*22. *Cap. 25.* signifies a thin sort Of Pulticula,-or Pap, sit to he  
supp’d: It is made of Wheat, or Zea, ground and reduced to  
a Very fine Flour, and is proper for Infants. *Dioscorides, Lib.  
st. Co* I I4. tells us, that it is a fothile Liquor, made of Very  
fine Flour os Zea, and may he used-byway of Cataplasm. The  
Term is received among the *Greeks,* tho' *Pliny* says it has an  
*Egyptian* Original. - *Gorreeus. sc rt.* : l i τ.

: ATHERINA, a small Fish mention'd by *Aldroevandus,*which as very full of Bones, shut otherwise Very good Food, as  
heing easy os Digestion, and supplying good Juices, .v - -.

ATHEROMA, ἀθέρωμα, is a colourless Tumor,, void of  
Pain, containing, in a: -membraneous-Coat, Matter like.Pap,  
called άθήρα, intermix'd sometimes with hard and stony Cor-  
Puseles,-and Others like-the Scrapings of Sulphur, and .nowA  
and- then like chewtd Bones ofChickens. *Leonidas vocites,* that  
he sometimes met with things like Hairs inclosed within a Very  
gross Humour ; and *Philoxenus,* that he sound Animals lodged  
in the Humour, which were like Gnats or small Flies.

An ἀθἐρωμα, than, as oblong, imminent, hard, not easily  
impress’d by the Fingers, nor, after Impression, hasty to restore  
itself ; which Marks distinguish it from theMelineris, which  
is more round, low, wide, soft, sand easily gives Way to the  
Touch, and aS soon returns. *Gorraus.* See TUMOR. -

ATHLETICUS, ἀθλητικό εξις. *Athletica Habitudo,' an*Athletic Habit of Body;-so the Antients-call'd that-State of  
Body which was full, fleshy, and robust; for fuch was the Ap-  
pearance of the *Athleta,* or Wrestlers. ‘ - .They were not of this  
Constitution by Nature, but acquir'd it by the closest Applica-  
tion to the Gymnastic Art. Their principal View in this Study

was to take fuch Care of their Bodies, as that they-might be  
well fortify'd with much and solid Flesh, and heve then Veins  
full of the best and most fibrous Blood. Nor did they only aim  
at Strength, hut Bulk and Ponderosity, the better to overbear  
and foil their Adversary. For this end, it was necessary to use  
much Food and Exercife: The first was of such a Nature, as  
not easily to he dissolved and dissipated, such aS Beef, Pork,  
Bread, and Cheese; and what, says *Galen,* is extoll’d by all,  
the finest Wheat-flour, with Cheese-cakes, and other Dainties  
made thereof, which he, in his fifth Book of the Preservation -  
of Health, mentions as provided for Wrestlers, to increase them  
Strength and Vigour. Their Bread was anciently, by a pecu-  
liar Name, call’d *Coliphium,* ἀπὸτῆ κώλ» καὶϊφι, from *Firmnes.s  
of Limbs.* They observed no Time or Order in Eating or  
Drinking,. that they might the better be enabled to bear all  
Changes. I. They indulged themselves in Sleep and Gluttony,  
and roll'd in the Dust and Dirt: AS to all honestand necelsary  
Offices of Life, they were quite indisposed and useless. They  
who, by such Methods, had acquir'd this Habit of Body, were  
accounted excellent Athletae, Wrestlers, and the Habit itself was  
call'd ἀθλπτικῆ ἔξις, an *Athletic Hable.* But it grew to a Custom  
in time to call every corpulent and robust State of Body by.this  
Name, tho' not procur’d by the Athletic Art. Hence, in  
*Plautus, pugilice, pancratice, et athletice valere, so* put for  
*optime et sirmifsimes* and in *Celsus, Lib. An Cap. 6. an* Athle-  
tic Diet is put for a strong one, and such as is accommodated  
to repair the bodily Forces, aS *Budaeus* has observed in his Notes  
on the *Pandect.* But this Athletic Habit is censur'd by *Hippo-  
crates* as preternatural, and not so good aS a healthful one;  
for it is in Continual Danger from the Fuiness of the Vessels.  
Therefore it ought to be accounted *neutral* rather than *healths.  
soul,* hecause of the imminent Danger that attends it, except it  
be soon solved by a κενεαγζεἴια, *an Evacuation, or Emptying of*the Vessels. On other Accounts, as *Galen* writes. *Comment, in  
Aphor.* 3. *Lib.* I. it is faultiest, hecause *Athletae-* aheund with  
good Humours, and are in full Strength of Body; and, in his  
Book *de Atra Bile,* he owns their Blood to he very good. *Gor-r  
raus.* **See GYMNARTIcA.**

ATHLIPTOS, ἄθλιπτος, from α Negative, and θλἰβωἰ  
to press. Uncompress'd. Ἄθλιπτος ἐισβολή, as *Galen* says, is  
an expression used by some to signify the Approach of a sec  
verish Paroxysm without Compressions. This kind of Fever,  
he says,, at the. Very Beginning of the Fit, immediately raises the  
Pulse in Greatness and Swiftness, and does not make its Ap-  
proaches, as is usual with other Sorts, by Shakings and Shiver..  
ings, a Coldness of the extreme Parts, or outward Superficies,  
with a Vellication, Grayafion, or Compression of the Stomach,  
and A small flow Pulse; for one or more of these Symptoms  
attend the Access of a Paroxysm, and soon after sometimes sue-  
ceeds. a Vomiting, which is a plain Indication of a Conflux os  
Vicious HumourS'to the Stomach; and the Blood, retiring from'  
the whole Superficies inward to the Viscera, must occasion  
Compressions, Obstructions, and Distensions of the principal  
Arteries. A Fever that does not make its Attack on the Patient  
by any of these Methods, in fain to make an ἄθλιπτος ἐισβολή,  
" an Attack without Compressions.” *Galen, de Prcefag. ex  
Puls. Book* 3. *Chap.si.*

ATHONOR. The same as **ATHANOR.**

ATHOReCTOS, ευδοήρεκτος, not drunk. Sober.

-. ATHRIX, ἄθριξ, from *a* Negative, and θρὶξλ a Haim  
Smooth, without Hain.

ATHROESMA, ἄθροισμα, from ἀθρὶος, collected toge-  
then. This is a Term infrequent Use among the Physicians of  
the Empiric Sect. It signifies the entire Collection Os all thein  
Observations. ..... -Ψ .

ATHROOS, ἀθπόος, an Adjective, orAthroon,  
Adverb, in Medicinal Authors, imports copious, accumulated,  
or sudden, and is the Reverse to. *by degrees:* It is apply’d to  
the Secretions. Nutrition, and other things.

- ..ATHYMIA, from α Negative, and θυμός. Courage. Pusil\*  
Ianimity. Tn Medicinal Authors it usually signifies that De\*  
jectedness. Despondency, and Despair, which frequently occur  
in the Course *of* Distempers, especially in some Constitutions.;

ATINCAR, or ATINKAR, Borax. *Rulandus. Johnson:*. ATITARA, the *Brasilian* Name sor the *Palma humilisspin  
nofa. Raii Hast. Plant. . A . ..*

ATLAS. The first Vertebra of the Neck, mark'd *Fig. cy.  
in Table* 8. is call’d Atlas, because it supports the Head, aS  
*Atlas did* the Ginhe of the Universe, according to the antient  
Fable. It has neither Body, nor spinal Apophysis. The Hole  
or Opening in it is much larger than .in the rest. It looks  
like an irregular bony Ring, fin’d all round with Eminences and  
Cavities. It maybe divided into two Archesthe anterior,or  
largest; and posterior, or smallest.

The anterior Arch is form'd by two thielc lateral Portions,  
and a small curve middle Parr, which, with the other, makes 4  
Notch in the anterior Part of the great Cavity of the Vertebra.  
The lateral Portions may .he look'd upon aS # Body in rwo Portas  
without which the first Vertebra would have been too weak th  
sustain the Articulations. .

In the Middle of the convex Side of the posterior Arch, is a  
Tubercle, a little pointed, larger than the anterior Tubercle,  
and mark’d with Muscular Impressions on each Side, and on  
the upper and lower Edge. This Tuhercle seems to he in the  
: Place of the spinal Apophysis.

1 The tranfveife Apophyses of the first Vertebra arise from  
. the Middle of the Breadth of the lateral Portions, being per-

forated perpendicularlv at their broad Origins. They are much  
longer than those of the five Vertebra below them, and, con-  
tracting gradually, they terminate in an obtuse Point, which is  
somerimes in a manner double, and mark’d on the upper and  
lower Side with Muscular Impressions,

The superior articular Apophyses are larger than any other  
Apophyses of the same Kind in the whole Spine. Theis Situa-  
tion is almost horizontal, and their anterior Extremities are  
turn’d more inward, that is, nearer one another than the poste-  
rior : - They are, in a Word, every way proportion’d to the  
Condyles of the Os Occipitis.

The inferior articular Apophyses are lest hollow, shorter,  
and broader. They are inclin'd laterally from within outwards,  
and from above downward. They are directiy under the supe-  
rior Apophyses ; and thus the articular and transverse Apophy-  
ses, the Holes and lateral Portions on each Side, are all in the,  
same Line. ’ - .

There is a long Notch, or kind of Groove, hetween each  
superior articular Apophysis, and the posterior Arch of the  
bony Ring, reaching from the Hole in the transverse Apophysis  
backward ; in which Notch the Vertebral Blood-vessels, in the  
natural State,’ make a Turn; before they enter the great Occipi-  
tal Foramen. Sometimes, tho’ very rarefy, there is' a com-  
pleteHole in the room of this Groove. There is anotherNotch,  
but more shallow, on each Side, hetween this Arch and the in-  
ferior Apophyses. -

In the internal Circumference of the great Hole of this Ver-  
tebra, in the Middle of the great Notch, is a Cartilaginous Im-  
pression for the Articulation of the Axis of the second Verte-  
bra-; and on each Side of that Notch, hetween the superior  
and inferior Apophyfes, there is another fmall Impression for  
the insertion of a transverse Ligament, which secures the Axis  
in its Place. All round this Circumference, both toward its  
upper and' lower Edges, there are many other Inequallties or  
- Impressions. *lVinsemyz Anatomy.*

ATLE, an *Egyptian* Name for the Tamarisk. *Blancarde*

ATMOSPHAERA, the Atmosphere. The whole Bndy of  
Vapours, and Air, surrounding the Earth. See ABR. . It is  
deriv’d from

ATMOS, ἀτμὸς, a Vapour, or Exhalation.

ATOCIA, from α Negative, and τμτω, to bring forth  
Young. Sterility. *Blancarde* But ἀτοκοι, in *Hippocrates,*.ufually signifies Women who abstain from the Means of Fe-  
cundam, that is, the Embraces of the. other Sex.

AT0CIUM, a Name for the *Lychnis Sylvefiris. Blan-  
card.* But ATocIUM, ἀτοκιον, also signifies a Medicine which  
prevents Conceptiori.

ATOLLI, a sort of *Pap,* made os the Meal of *Mays* and  
Water, which the *Indians* mix with their Chocolate.

ATOLMIA, ἀτολμἰα, from α Negative, and τολμα. Intre-  
pidity. Pusillanimity. ,

ATOMUS, ἀτομος, from α Negative; and τέμνω, to cut  
- or divide. An *Atom.-* A Particle of Matter fo fmall as to ad-  
mit of no farther Division.

*Caelius Aurelianus, Acut. Lib. i. C.* I4.. giving an Account  
. of the Philosophy of *Aselepiades,* says, it was bis Opinion, thet  
. the *-Primordia* of all Things were *Acorns,* which were not the  
Objects os our Senfes, but were only perceptible by the Under-  
standing, Thefe *Atoms,* according to him, had of themselves  
no Qualities at all; for he asserted, thet the Qualities of the  
Bodies which they compose depended upon the Order, Figure,  
Number, and Grandeur of many of thefe Particles join’d toge-  
ther ; And when he was ask’d. How it happen’d, thet Bodies  
possess’d several Qualities, since the *Atoms, of* which they were  
composed, possess’d none at all; be anfwer’d, Thet these Qua-  
lities depended upon the Order, Figure, Numher, and Bulk of  
several of these *Atoms* united and join’d together ; and, for illu-  
fearing bis Opinion, drew a Simile from Silver, which is white  
when in the Lump, but black when filed down; and from the  
Horns of Goats, which are black when enure, and white when  
rasp’d down. .:

From this Account of the Philosophical Sentiments of *Asele-  
piades,* we plainly fee, thet they were somewhat different from  
thofe of *Epicurus* or *Democritus,* the\* all the three acknow-  
ledged *Atoms;* for the *Atoms* of *Aselepiades* were divisible,  
whereas thofe of *Democritus* and *Epicurus* were supposed inca-  
pable of heing divided. I am of Opinion, that *Caelius Aure..  
dianus,* by *Atoms,* means no more than the όγκοι. ot *Molecules***of** *Galen. Epicurus* acknowledged Molecules as well as *Asele-  
piades* ; and *Lucretius,* who was contemporary with *Aselepiades,*also mentions something of the fame Nature: But then *Epi-  
curus* and *Lucretius* do not look upon Molecules as the first  
**and** constituent Principles Of Bodies, het only as the first Ef-

fects produced by an Assemblage of *Acorns* ; which, according  
to them, were the true and genninePrinciples: Whereas *Ascle-  
piades,* according to the Account of *Caelius Aurelianus,* feerns  
to mean Molecules by bis *Atoms*; the’, \_ at the same nine, he  
gives the Name of *Atoms* to the *Molecules* themselves. But we -  
.have some Reason to think, that this Author did not throughly  
understand *Aselepiades,* if we rested: upon a Passage of *Galen,  
de Theriac. ad Pisen. Cap.* II. where he says, " That *Asele-  
." piades,* adhering to the Sentiments of *Democritus* and *Epi-  
il curus,* with regard to the Principles of Bodies, had only

changed the former Names Of Things, calling *Atoms* Mole-  
“ cides, and a *Vacuum* Pores.” But *Galen* himself [de Hipe-  
*pocrat. et Platon. Decres Lib. 5. C. 3.)* establishes a formal  
Difference between the Sentiment of *Aselepiades* and thet of  
*Democritus* or *Epicurus,* in these Words: " Whether, says  
“ he, the Bodies of Animals are composed of Molecules and  
" Pores, as *Aselepiades* believed, or of small indissoluble Par-  
" tides, as *Epicurus* imagin’d.” The former of the above-  
cited Books is suspeded not to he written *by Galen*; but the lat-  
ter has undoubtedly him for its Author. The Author of thet  
Book call’d the *Introduction, Cap. g.* which is falsty ascrib’d to  
*Galen,* informs us, that the Elements of Bodies were, accord-  
ing to *Aselepiades, majepe* or Molecules, or small brittle

.Masses; and thet it- was probably this Brittleness which distin-  
guish’d .asc/quindeds Principles *of* Bodies from those of *Epicu-  
rus,* which were indissoluble and indivisible. The Principles of  
*Descartes* seem, in some Things, to agree with those of *Asele-  
piader.,* and those of *Gassendi* with those of *Epicurus. Le  
Litre. . . '*

ATONIA, ἀτονϊα. *from a Negative,* andraina, to stretch.  
.Relaxation, Laxity, Debility, or Distemperature. This Word  
was much in Use among the Physicians of the Methodic Sed,  
who ascribed the Caufes of all Distempers to Relaxation,  
Stricture, or a Mixture of these. . ’ -

. ATOPOS, ἀτοπος, from α Negative, and τοπος. a Place.  
It signifies absurd, or inconvenient. It is used by *Hippocrates,  
Aph. rfl.. Sect. 4.\* . .*

. ATRA *Lilis.* See BrLts.

. ATRACHELUS, ἀτράχηλος, from α Negative, and τρα-  
χηλος, the Neck , sbort-necked. It is usss by *Galen* ; and  
sometimes also signifies beheaded.

ATRACTOS, ἀτρακτοστ, a Distaff, or the wonden *Parfof.*a Dart. This Word is sometimes used in *Hippocrates.*

ATRACTYLIS, Ossic. Ger.Ioo8. Emac. II7I. RaiiHist.  
*is.* 304. . Άτραάτυλἱς, Dioscorides. *Atractylis lutea,* C. Β. 37c.  
*Atractylis flare luteo.* Park. 963. *Atractylis ver a, sure- lnteo,*LB. 3. 83. Chab. 353. *Cnicus Atractylis lutea dictus,* Horn .  
Lugd. Bae I64. Tourn. Inst. 45I., Boerhi Ind. A. I40:  
*Carduus luteus erectus reticulatus, ramis fusum referentibus.*Hist. Oxon. *a.* I6o. *Cardus-Cnicus Atractylis dicta* Pluk. .  
Almag. 82. DISTAFF-THISTLE.

The lower Leaves of this Thistle are long and narrow, deeply  
cut in onhoth Sides, somewhat hairy, and het little prickly.  
The Stalks also are harry, without any Prickles; het the Leaves  
which grow on them are very full, heing smaller, but broader  
in Proportion than the lower Leaves, stiffer, and not so deeply  
cut in. The Stalk at the upper End is divided into three or  
four Branches, on which stand the Flowers, inclosed in stiff  
bard prickly Leaves, among which grow yellow fistolar Flow-  
ers in scaly *Calices ;* after which come whitish angular Seeds,  
like those os *Carthamus* inclosed in Down. It grows in  
warm Countries, as *Italy* and *Greece,* where theWomen use the  
Stalks for Distaffs. It flowers in Summer.

The Leaves ouly of this Thistle are used, and those very  
rarely, though some Authors affirm they heve the same Virtues  
with those os *Carduus Benedictus;* and it is particularly com-  
mended, against the Stinging of Scorpions, *Miller’s Bot. Off.*

It is aperitive, sudorific, and a good Antidote against Poifon,  
heing taken in Decoction. They extrafl by Distillation a Wa-  
ter, which hath the same Virtues of the Water of the *Carduus  
Benedictus.. Lemcry de Drogues.*

ATRAGENE, Offic. *Vioma,* Ger. 739. Emac. 886.  
MeI. Pin. I25. *Visrria vulgi,* Herm. Flor. 2. *12.* Merc..  
Bot. I. 77.. Phyu Brie I 30. *Clematis seylvestris latifolia,***C.** B. Pin. 3oo. Boerb. hid. A. 46. Tourn. Inst. 295. Elem.  
BoL 244.. Dill. Cat. Gissi I43. *Clematis silvestris latifolia  
five Vsorna,* Park. Theat. 38o. *Clematis latifolia seu Acragere  
quibufdam,* J. Β. 2. I25. Ran Hist. I. 620. Synop. 3. 25S.  
*ClematisArtbragene Theophrasti quibusaam.* Chain II6. *Flam,  
mule sepium foliis integris,* Rupp. Flor. Jen. 54. Buxb. ns.  
TRAVELLERS JOY.

This Plant is to he found under Hedges, and flowers in **the**Month of *July.* The Whole of the Plant is ufed. Its Flowers,  
Bark, Seeds, and Root, are of a caustic Quality.

The Bark apply’d to the Skin raises Blisters. *Dale*

ATRAMENTUM SUTORIUM, r: Vitriol. Chilean-  
thum. See VITRroLUM.

ATRAPHRAXIS, or ATRAPHAXIS. Α Name of **the**ATRiPLEx, which see

ATRECEOS, ἀτρεκἐως, from ατρεκύς, true, chrtaim has  
various Significations in *Hippocrates ;* for the most part, as  
*Erotian fays,* it is put instead of ἀκριβῶς, exactly, and but sel-  
dom for ἀληθῶς, truly, certainly. The Word is also Variousty  
expounded by the Interpreters of *Hippocrates.* In *Bacchius* it  
signifies άληὑῶς, ἀυτάρκως, ἀκριβῶς, truly, fufficientiy, exactly.  
In *'Philistus* it is ἀκριβῶς only : And *Epicles* expounds it by  
σαφῶς, ἐιλικρινῶς, openly, fincerely, perfectly, *in Prognost.  
is* δύναται άΐἐ ολησιν ήμέρησιν οὐδὲν τουτέων ἀριθμῦσθαι ἀτρεκἐως,.  
" none of these (Diseases) can be *exactly* calculated by whole  
" Days." In *Prorrhet. Q.. drgrnnas* is one who

observes a certain Method of Diet, and Way of Living. And  
again, in the same Book, ἀτρεκέστατα δὲ καὶ ἐπ? πλεῖςον χρόνον  
τὰς φυλακἀς ἀιει τῶν δεινότάτων ποιέεσθαι.. " We must *very  
“ carefully,* and for a long time, be upon our Guard against  
" the most formidable Accidents.’.' \* In his Book os Fractures,  
ἀτρεκἐς δέ ήδὲν, " there is nothing *certain.”* In his Treatise  
περι ἄρθρων, κληίς δέ κρετεαγεῖσα, *ην gulv* ἀτρεκἐως ἀποκαυλισθῇ,  
" a Fracture of the Clavicle, if it be *vjholly* broken off like  
" a Stalk, that is, transverfly.'' Here *Galen* explains ἀτρεκἐως  
hy ἀκριῤὸῶς, δι' ολως, βλεκλώρως, exquisitely, wholly, quite, en-  
tinely.

Ἀτρεκείη, in *Hippocrates,* signifies an Asseveration, or affirm-  
ing a Thing for perfectly known’ and certain. Thus in his  
second Book of Predictions, άμφί δὲ τῶν γυμναζβμένων καὶ ταλαι-  
πίρεἐντων, τὰς μὲν άτρεκείας τἀρ λεγομένας, ώς λέγουσιν οι λέγοντες,  
κτε δοκέω ειναι, ἔτε, εἴ τις δοκέει, κωλήω δοκέειν\* " AS for  
" what relates to‘those who satignie themselves with Labour  
Ci and Exercise, there are Things asserted for certain Truths  
." hy the Relators, to which I give no Credit myself; hut,  
" however, leave every one at Liherty th believe them, if he  
cc thinks fit."

ATREMEAS, ἀτρεμέας, in *Hippocrates,* is put for ἀτρέμας,  
(from α Negative, and τρέμω, to tremble) placidly, quietly,  
remifly. Thus *Booh* 5. *Epid,* οὐκ ἀτρεμέας, that is,, οὐκ. άτρέμας  
ταχεν, he had no Rest,’ which in *Epid.* 7. is express’d and ex-  
plained hy ήδ’ ητρέμιζεν. Ἀτρἐμάς is expounded,' in *Hefschius,*by ήσύχιιις, ήσυχῖί,-quietly, as ἀτρεμια is by ἡσυχίαν άτρεμέων  
by ὑτυχάζων, and άτρεμῆσαι by ήσυχάσαι. By ἀτρεμέεντα,-  
*Hippcerates* means those Parts of the Body which are at Rest ;  
fuch are understood to he those Parts which are without the  
Articulation in two Bones which meet at the Joint, as the Parts  
about the Thigh and the Leg with respect to the Knee.  
Ἀτρεμέοντα, - in *Erotian* upon' *Hippocrates,* is expounded by  
ἤρεμοῦτα, resting, with an Eye to that Passage in his Book of  
Fractures, καὶ -τὰ μῆ ἀτρεμέοντα ἐν τῳ τουτἔῳ σχήμὲντι, ". those  
" (Bones) which remain not at Rest in the same Posture.''

ATRESIA, ἀτρησία, from α’Negative, find τράῳ or τρέω,  
to perforate;. Impersoration. .. .

ATRETI, *drgifiot, "imperforate.* Those are called so in  
either Sex,, whose Anus or Urethra are not perforated; and  
.Women, whose Vaginas are closed, have also this Name in  
Chirurgical Writers. See **IMPERFORATIO.** ώ

ATRICES. Small Tubercles about the Anus,- which recede,  
and return again, especially at first. They are. by *Palesius de  
T.aranta* reckoned among Condylomata and Fici. *-Castellus.*

ATRICI. Small Sinuses in the Extremity of the Intestinum  
Rectum, which-do not reach so sar as to perforate into its  
Cavity.

ATRIPLEX. . There are three Plants which usually go by  
this Name. The first is the

*. Atriplex,*. Offic. Chain 305. *Atriplex alba hortensis,* J. B. 2.  
970. Raii Hist. **I.I9I. -** *Atriplex sive olus aureum.* Park. Pared.  
488. *Atriplex hortensis alba, -sive pallide virens,* Co B. **I** I 9.  
Hist. Oxon. 2. 6o6. Tonrm Inst. 505. Boerh. Indi Αἰ 2. 89.

*. Atriplex fatwa alba.* Ger. 256. Emac. 325. *Atriplex spuria  
hortensis candida,* Volck. 53. WHITE ORACHE. *Dale.*

*Dioscorides* says this Plant is also call'd *Chrysolachanon.*

This is an annual Plant arising yearly from Seed. The  
-Leaves are triangular, but longer than broad, with two Ears,  
Or sharp Pieces, at the End next the Stalk, covered, especially  
when young, with a slippery Mealiness, which may be easily  
rubb'tl off, of a palish-green Colour. The Stalk is angular and  
branch'd, growing about two or three Feet high, having the  
Leaves which grow on them somewhat longer than those below,  
and without Ears. On the Tops grow Spikes os herbaceous  
Flowers, of a greenish-yellow Colour; which are succeeded by  
blackish round Seed in fiat Seed-Veffeis, of two round Leaves  
clapt together. The Seeds are of two Sorts,’ one smaller by  
half than the other, and blacker and more shining. There is  
One Species of this *Orache,* which has the Leaves, Stalks, and  
Seed-Vessels, all of a purple Colour, differing in nothing else  
from the former. They are both cultivated in Gardens, being  
used promiscuoufly. *Muller\* s Bet. Off.*

It was by the *Greeks* called Ἀτράφαξις, from ἀδρόως and  
ἄυξβν, because it soon grew to a. great Height. There are  
three Species of it, the *Red,* the *paleDreen* or *White,* and the  
*'blachis.b Atriplex.* 'Tis a well known Pot-herbs and Very often  
boiled with Cabbage ; though generally 'tis more used by the  
Poor than the Rich and Luxurious. Yet set. *Joseph Joes.por*

*Manuduct. ad Vit. Long, pi* 2. *Caso. S'.* informs us,, thatthe jury  
habitants of *Brabant,* the Low Countries, *France,* and *Bur-  
gundy,* esteem it so much, and use it so frequently, throughout  
the whole Summer Season, that there is scarcely eVer a Dinner,  
or a Supper, in which the Garden Atriplex does not make a  
Part. It affords but littie Nourishment, and is cold and moist.;  
but the Humidity it contains is of a softening and mollifying  
Nature, smce the Soop or Victuals among which it has been \*  
boiled, proves laxative. It is esteemed good for People of hot,  
choleric Constitutions, and- such as are-subject to\_ Vomitings of  
Blood. But when eaten too plentifully, .it renders the Mass ofi  
Blond watery, and brings on the Jaundice and Dropsies': For  
this Reason the Use of it was discarded by *Pythagoras,* aS wo  
are told by *Pliny, L.* 2. *Hi N. C.* 20. The same Anther  
also quotes *Dionysius* and *Dioclet,* who both affert, that this '  
Herb is Very prejudicial to the Stomach, and lays a Foundation  
for numberless Disorders. The Herb itself, bruised and applied  
to the Parts in .which Thorns or any other final! Splinters have  
heen plunged, extracts them, and cures the Wounds occasioned  
by them. When apply'd to the Navel, it diilodges and expels  
"Worms. It is also used in mollifying Clysters, and in such  
Dressings as are intended to mitigate and allay Pam. Its  
distilled Water, mixed with Aloes, stops Haemorrhages, and  
cures scald Heads. The Seeds are purgative, but often operate  
like an Emetic. The Country People in *Lombardy* make Pies  
of this Heth, in Conjunction with Butter and Cheese, which  
they look upon as excellent Food. In *Virginia* the Inhabitants  
prepare a Salt from the Stalks of this Heth, which they use in  
Dressing their Victuals. *Barth. ’Lorn. Botanologia.*

*Dioscorides* fays-the Seeds cure the Jaundice, if taken in Hy-  
dromel. \* ' so. . "so si. so

*Atriplexsiylvestrio,* Offic. JI. B. 2. 972. Ran Hist. I. Ioy.  
Chain 3O5. *Atriplex fylvestris altera,* C. B. I Io. Ger. Emac.  
326.. *Atriplex silvestris, folio sinuati, saturate virente, spied  
rubra.* Hist. Oxon. 2. 6O4. *Atriplex silvestris vulgatior  
sinuata.* Park. 747. *Blitum Atriplex fylvestris dictum, . Rori.*bynop. 63. *Chenopodium folio laciniatouricomcsc purpurascente.*Touch. Insh 5O6. Boerh. Ind. *Α. 2.* 90. Buxis. 69. *Chenopo-  
dium foUo sinuato candicante.* Dish Cat. Ico; WILD  
ORACHE. ' Ἕ ἐν

The Leaves and Seeds are used aS Emollients like the precede  
ing. These, either raw or boiled, are said to discuss Bosh.  
*Dale! - '. ' '*

*Atriplex olida,'* Offic. Ger. 258. Emac. 327. Raii Hist, I.  
ι98ί *Asm.plexsecciida,* Co B. Pin .119. Cod. Med. I6. J. B.  
2. 974. Hist. Oxon. 2. 605. ’ *Atriplex foesuda et Fulvaria,*Chain 3O7. *Atriplex olida, sive fylvestrissartidd.* Park. Theat.  
749ί *Blitum foetidum Puluaria dictuni, K.rSynbpl sm. Crhel.  
n'opodium fcettdum,* ET Bos, 406. Touch. Inst. 506. Boerh.  
Ind; A. 2. 90. Dilli Cat. IO6. Buxb. 68/ *Atriplex Chenapodia  
faetida,* Hort. Monsp; 2sp STINKING ORACHE. *Dale.*

The Stalks of stinking *Argrach,* or, as it is usually called.  
*Orris,* generally lie flat on the Ground, spreading about  
round- the Root, striated or chanelled, and of a whitish Coil  
Jour; the Leaves are small and roundish, and pointed at the  
Ends, set alternately on the Stalks, and covered oyer, as is the  
whole Plant, with an unctuous Mealiness j the Seed grows in-  
closed in Spikes, of small green herby Flowers, being small,  
black and shining. The whole Plant has a strong fetid fishy”  
Smell: ItgrowS upon DunghilS, and waste Places. so :

This\* jo an Herb particularly appropriated to the Feinale. Sek,  
heing aperitive and deobstruent, and useful in uterine Disorders,  
good to promote the menstrual Evacuations,, to expel the After-  
birth, and help Child-bed Purgations, to appease the Strangu-  
lation of the Womb, and take off Hysteric Fits. It is usually  
given in a Decoction. There is a Syrup kept in the Sheps,  
made with the Juice of' this Plant and Sugar. *Millegrs EoC  
osse. - . -fsu .sse- - su\-si-*

ATROPHIA, ἀτροφίά, front *Ac* Negative, *and rfipla,* to  
nourish. An Atrophy. \* . . . . .' ss

*Morton* defines the different Species os Consumptions thus si  
A Consumption in general is a Wasting of the Muscular  
Parts of the Body, arising froth the Subtraction or Colliqna-  
tion of the Humours, and that either with Or without a Feil  
Ver, and it is either original or symptomatical. - : —

An original Consumption is that which arises purely from  
a morbid Disposition Of the Blood, or animal Spirits, which  
reside in- the System of the Nerves and Fibres, and is not the  
Effect of any other preceding .Disease;', of which there are two  
Sorts, that is, an *Atrophy,* and a Consumption of the Lungs.

An *Atrophy* is an universal Consumption proceeding from the  
whole Habit of the Body, and not from any Distemper of the  
Lungs, or of any other Entrail, without any remarkable Fever,  
and is either nervous,- or the EffectOf Evacuations.

A nervous *Atrophy,* or Consumption, .is that which owes its  
Original to a bad and morbid State of the Spirits, arid to the  
Weakness or Destruction of the Tone of the Nerves; from  
whence, an Imbecillity, and an universal Consumption in the  
whole Habit of the Body, ultimately proceed from the want of  
a due Assimilation of the nutritious luice; so from the Begin-

*Jung* of the bisease there is to he found a want of Appetite, and  
a bad Digestion in the Stomach, from an imperfect Elaboration  
and Volatilization of the Chyle. Winch-Sort *'gis Atrophy* may  
justly he reckoned one of the fatal Symptoms of the Scurvy.

An *Atrophy* from Inanition is that which derives its Original  
from a preternatural Defect or Subtraction of the nutritious  
Juice, and that long and habitual, which differs according to  
the Variety of the Outiets formed in the Body either by Nature  
or Art, by which this precious Liquor either has or may run  
**-off,** and be wasted. . ' ’.

. A.Consumption of the Lungs is an universal Wasting of the  
Parts of the Body, caused by some Distamper of the Lungs, as  
Infarctions, Swellings, Inflammations, and exulcerations; and  
thence it is attended with a Cough, Difficulty of Breathing, and  
other Symptoms of the Breast ; and accompanied with a Fever,  
which at first is stow and hectical, afterwards inflammatory,  
and at last putrid and intermitting.

. A Symptomatical Consumption is that, which, though it  
immediatelys proceed from a preternatural and ill State os the  
Blood and Spirits, yet has a mediate Dependence upon some  
other preceding Disease, which impress’d that morbid Disposi-  
tion on the Spirits and Humours.

*A* **NERVOUS ATROPHY.***e' - ..... .. \_ . - -*

. A: Nervous *Atrophy,* or Consumption, is a Wasting of **the**Body, without any remarkable Fever, Cough, or Shortness of  
Breath; but it is attended with a Want os Appetite, and a had  
Digestion, upon which there follows a languishing Weakness of  
Nature, and a wasting of the Flesh, every Day more and more.  
Which . kind of Consumption I have sometimes observed in  
*England,* but most frequentiy amongst those that have lived in  
*Virginia,* aster they have come over hither.

In the Beginning of this Disease the State os. the Body ap-  
pears oedematous and bloated, and, as It were, stuffed with di-  
spirited Chyle , the Face is pale and squalid, the Stomach loathe  
every thing but Liquids, the Strength of the Patient declines so  
fast, that, before the fleshy Parts of the Body are evidently con-  
sumed, he‘is render'd feeble, and almost always confin'd to his  
Bed. The Urine also keeps not constant to any Colour, shod  
for the most part it is high-co lour'd, and but littie in Quantity ;  
yet it is sometimes, (as it frequentiy happens in Nervous Distem-  
pers) tho' seldom, pale and plentiful. But there is no const-  
ilerable FeVer to be discover'd either by the Pulse, Or a Thirst,  
Or Heas,. how high-colour'd soever the Urine appears: So' that  
the Pathognomonic Signs, or those which evidently manifest the  
Beginning of this Consumption, are, a Decrease of the Patientis  
Strength, and a Loss of Appetite, without any remarkable Fe..  
ver. Cough, or Shortness of Breath, tho' in the Progressos the  
Distamper, when a Consumption of ’ the Flesh has gradually  
affected the whole Habit of the Body, there is some Difficulty  
and Uneasiness in Breathing to be .observed, as it happens Io all  
those who are Very weak.

The immediate Cause of this Distemper I apprehend to **he**in 'the System of the Nerves, and proceeding from a preterna-  
rural State of the Animal Spirits, and the Destruction of the  
Tohe of the Nerves, whence I usually call this *a Consumption  
in the Habit of the Body.* For as the Appetite and Digestion  
are destroy'd, thro' the weak and infirm Tone of the Stomach,  
Io also the Elaboration, Assimilation, and Volatilization of the  
nutritious Juices, are hinder'd, in the whole Habit.of the  
Body, from the distemper'd State of the Brain and Nerves.

The Causes which dispose the Patient to this Disease,' I heve  
generally observed to he Violent Passions of the Mind, the in-  
temperate Drinking of spirituous Liquors, and an unwholsome  
Air, by which it is not surprising that the Tone of the NerVes,  
and the Temper of the Spirits, should he destroy'd.

This Distemper, like most nervous Diseases, is Chronical,  
hut- Very hard to be\* cured, unless a Physician be called at the  
Beginning. At first it flatters and deceives the Patient; for  
which Reason it usually happens, that the Physician is consulted  
too late. It terminates in an Hydropieal and Oedematous  
Swelling of the Body, especially of the lower and depending  
Parts: In which Case no Hopes remain of the Patient's Life,  
neither is there any thing more to he done sor his Cure, than  
giving him some Ease, whereby his miserable Life may he pro-  
tracted for some Days. ....

*. The* **C D R Ε. -**

The Cure, if attempted in due Time, consists in the conve-  
nient Use os Stomach Medicines, and such as comfort and  
strengthen the Nerves, such as Chalybeates, antiscorbutic, ce-  
phalic, and bitter Medicines of all SortS: For Example,

Let the Patient, if his Body he costive, take every third or  
fourth Morning four Ounces of the bifter Decoction, with  
Sena; or every fourth Night, two Ounces of the Tinctura  
Sacra, or of our sacred Cephalic Tincture, made with the  
Species of Hiera Piera infused in Rue-water, Block; Cherry-  
water, and strong Piony-water.

For his common Drink let him use Ale, in which a Bag of,  
Cephalic and Antiscorbutic’ Ingredients has been suspended.  
An Hour before Dinner let him take thirty Drops os *Elixir  
Proprietatis* in a Draught of Wormwoed White-wine. To  
The Region of. the Stomach let there he applied the magisterial  
’Stornach-plaister, with some Drops Of the Chymical Oil of Cin-  
namon, and Oil of Wormwood. Or let the Stomach he so-  
imented every Day with *French* Claret, in which Aromatic  
Bags of the Leaves of Mint, Wormwoed, Cinnamon, Mace,  
Zedoary, Galangai, Cyperus-rootS, and Calamus Aromaticus,  
have heen boiled. If it be in the Summer, let him use the Cha-  
lybeate Waters ; but if Winter, let him make Use of a Cha-  
lybeate Syrup, or our Chalybeate and Aromatic Wine, made  
with the Filings os Steel quenched three or four times in strong  
White-wine, and with Zedoary-roots, Galangai, Nutmegs,  
the best Cinnamon, Mace, Cuhebs, Cloves bruised, and steeped  
in the same Wine. But for Chalybeates, ! prefer *Mynsichrs*Extract hefore any other, which I order to be given for twenty  
or thirty Days, in the Form of a Bolus, or Pilis. For Example:

Take of *Mynsichlls* Extract of Steel, half a Scruple; Balm  
of Gilead, (which in this Case is Very proper and henefi-  
cial, because it is not a littie grateful to the Stomach and  
Nerves) seven Drops; old Conserve of red Roses, a  
Dram : Mix them, and make them up into a Bolus, to he .  
repeated every Day r Or if the Patient chooses to take  
Pilis, let the Extract he made up into that Form; in the  
manner following

Take os*MynsuFlls* Extract os Steel, half a Scruple ; of  
Balm of Gilead, -seven Drops of *Halsis* Powder, **six**Grains ; of the compound Powder os the Roots of Arum,  
four Grains ; of Powder of Liquorice, as much as will  
make them into the due Consistence os Pilis: Make the  
Mass into Pilis of a middle Size; let them be gilded, and.  
repeated once every Day.

I ... ’.

. Opobalsamum also by itself, as likewise Spirit of Hartshorn,  
and Spirit of Sal Ammoniac, are of Use in this Case, because  
they are good for the NerVes. For Example:

Let the Patient take eight or ten Drops of Opobalsamum, or  
Spirit of Hartshorn, in a convenient Quantity of Sugar-  
candy, twice a Day. ' ' ’ . .

Let the Patient endeavour to divert and make his Mind chear-  
fid by Exercise, and the Conversation of his Friends: For this  
Disease almost always proceeds from Sorrow and Cares. Let  
him also enjoy the Benefit of an open, clear, and Very good  
Air, which Very much relieves the Nerves and Spirits. And  
hecause the Stomach in this Distemper is,principally affected, an  
agreeable Diet will be convenient; and the Stomach ought not  
to be too long accustomed to one Sort of Food.

***Of an* ATROPHY *from* INANITION.**

To this fort Of original Consumption from the whole Hahin  
of the Body, helongs also another land of Consumption, arising  
from the Impoverishment of the Blood, occasioned by the pre-  
ternatural . Subtraction .and Loss of the nutritious Juice.  
Whence the whole Mass of Blood, being deprived of tho nu-  
tritious and balsamic Juines, grows too hot, affording none  
or Very little Nourishment to the muscular Parts ; and hence  
there follows a Consumption of the whole Body , and an hecti-  
cal Heat fixed in the whole Habit, without any considerable  
Cough, or Difficulty of Breathing, or any other remarkable  
Affection of the Lungs, .at least,, in the Beginning of the Dis-  
temper. " But it must he confessed, that, in the Progress of it,  
the Dungs seem to be,\* in some measure, affected, especially  
where the preternatural Evacuations, which are the Cause of  
the Distemper, are stopped by Art without any Correction of  
the whole Mass of Blood, by which means it may recover a  
natural balsamic Nature, and such as renders it fit for Nourish-  
ment. In this Case it is not surprifing, that the hot and sharp  
Serum *os* the Blood continually passing, after the Passages where  
it used to be evacuated are stopped, through the soft and glan-  
dulous Substance of the Lungs, at last should stuff, inflame,  
and in the Progress exulcerate them; whereby it comes to pass,  
that this Consumption, winch was originally in the Habit of  
the Body, a littie before Death ends in a Consumption of the  
Lungs, with a Cough, Difficulty of Breathing, and other Pa-  
thognomonic Signs of that Distemper. And therefore I have  
often observed, that if the Appetite and Digestion are not re.,  
stored by fuch Medicines as have a peculiar Quality of altering  
the Blood, and strengthening the Stomach, so that the Mass  
may be supplied and filled with a sweet and balsamic Juice, the  
Consumption is not cured ; but at last is changed from a Con-  
sumption in the Habit of the Body, to a fatal Consumption of  
the Lungs.

And this Consumption is indeed akin to the Nervous Con-  
sumption before-mentioned. For as in that, which proceeds

front a preternatural State of the nervous Juice and Spirits, the  
nutritious Chyle which is continually carried into tho Blood, is  
rendered less fit for the Nourishment of the Partsand thence,  
as the Mass of Blood is loaded with stale and dispirited Juices,  
such Its are unfit for Nutrition, and there being mo Demand for  
fresh, a Loss of Appetite ensues, and a Sickness of-the Sto-  
mach, and consequently a Cohfumption of the whole Body,  
and at last a fixed hectical and colliquative Heat in the solid  
Parts, from the Heat of the Blood and Spirits: So in this kind  
of Consumption, the nutritious Juices running off froth .the  
Mass «of Blood with a full Stream, the muscular Parts of the  
Body, heing thus deprived of their due Nourishment, fall'into  
***an Atrophy,*** whereupon likewise the Mass of Blood'which re-  
mains, for want of new balsamic Chyle, 'is not only dispirited,  
and rendered unfit for Nourishment, but a preternatural, fixed  
and hectical Hear is kindled, not only in the Blood, but also in  
the Spirits, and all the solid Parts ; whereupon there'follows a  
Drought and want of Appetite. .This kind of Consumption is  
that, which we are now in the first place professedly to treat of  
But hecause the Cure of this kind of Consumption is to be al-  
tered, according to the Variety of the Evacuations, which are the  
Cause os it, I shall add nothing concerning the generalCure of  
It, but refer that to the several kinds of Evacuations, which are  
the Cause of this Distemper, to he spoken of under their pro-  
per Heads.

The things which cause these Consumptions, according to  
***Morton,*** are . . ' - ' .

..- An Haemorrhage.

.. A Gonorrhoea, or Fluor Albus. - '

Abscesses and Ulcers.

’ Giving Suck beyond whet the Strength of the Nurses can  
hear. '/

A Dysentery, or Diarrhoea.

A Diahetes.

**A** Salivation. ( . \*  
A Dropsy.

Profuse Sweats.

, Consumptions from all these Causes will he treated of tinder  
their respective Articles.

Besides the Causes above-mentioned, this general Consuinp-i  
tion, proceeding from Evacuations, frequentiy depends upon  
other Distempers; and therefore it may justly be called a gene-  
**ral *Symptomatical Consumption :*** As first, upon a Lientery, that  
**is,** when the Faculty of the Stomach, which makes the Chyle,  
is injured by a preternatural Disposition of the Spittie, and the  
ill Temper of the nervous Liquor: Whence it comes to pass,  
that the Blood and Habit of the Body (fince the Food that is  
taken is carried down through the Intestines, and comes away  
as it went in, without any Alteration) cannot receive any Re-  
emits from the Food ; and from hence there necessarily follows,  
***an Atrophy*** caused by Inanition. ;

Many times this general Consumption proceeds from a pre-  
ternatural Alteration, or Obstruction of she Gall and . Pancre-  
atic Juice, or else of the Juices, which naturally use to be  
separated by the small Glands, planted through the whole Duct1**of** the intestines, and which serve for the Separation ***os the*** ex-  
crementitions Parts of the Fond from those which are nutritious. .  
Hence the chylous Parts of the Food, which pass out of the  
Stomach, flipping by the small Orifices of the Lacteals, are  
thrust together with the Excrements by Stool; and that either  
white, and as such are evidently chylous from the Defect, or pre-  
ternatural Disposition of the Bile, (which is the proper Men-  
struum for separating the Chyle) as it commonly happens in the  
Jaundice, together with a great Weakness of the Body, and.  
wasting of the Flesh ; or else in yellow Stools, as in theCce-  
liac Passion, which either is from an Obstruction ***Os*** the Pan-  
Creatic Juice, and that which is separated by the Glands of the  
Intestines, or happens from the Depravation of the Nature os  
those Juices. In the first Case, the Urine is much tinged with  
a yellow, or Jaundice-colour; .but in the latter, it inouite con-  
trary. In both of them, the Chyle riot being separated from  
the excrementitious Parts of the Food, the Blood is deprived of  
its due Recruits ; upon which I have often observed, that an  
***Atrophy,*** or Consumption, and that a Very acute one, has seized  
the Patient. ......

Lastly, this general Symptomatical Consumption is sometimes'  
caused by many and large fcrophulous Kernels preternaturally  
situated in the Mesentery, by which (theLacteals heing freight-  
**ened** aS with a Thread, or being compressed) the Paflage of **the**nutritious Liquor, which is. separated in the Intestines,' and  
taken in thy the Mouth of the Lacteal Vessels, into the Mass  
**of** Blood, is either totally, or in part, hindered; in winch Cafe  
the Stools are large and chylous, the Belly grows hard, and is  
swell’d; but the Urine .stows in a Very little Quantity, yet\*  
keeps its natural Colour; thereupon, the Blood not being every.  
Day replenished with fresh Chyle, the muscular Parts are de-  
prived of their due Nourishment, and daily become thin, and  
at last are wasted to the degree of a Marasmus; though the  
Appetite at the same time be keen, find the Patient continues

always free from any thing of a Fever; an Instance of which  
kind I once mist with in a Boy about sour Tears old. ῖ \_ *s*

All these Symptomatical Consumptions are evidently incurs-  
thle, unless a particular Respect he first had to the Distempers  
upon which they depend; but if these aro onhe removed by  
Ast, this kind os Consumption ceases of its own Accord; and  
therefore the Cure of this Consumption is to be sought for in  
another Place, that is, in the . Cure os those Distempers which  
are the Cause os it. \*

ATTA, ἄττα, Father, an antient ***Pelas.gic*** Word, in an-  
other Dialect, Ἅππα. Ἔπίφθεγμα τιμητεκον νεωτέρου 'πρός πα-  
λαιοτεραν, ***Didymus.*** " A-Compellation os Honour given by a  
" younger Person to an elder. ” We ***sm Atta*** to an old Man,  
by way os' Reverence, aS if we Called him ***'Avus,*** " Grand-  
" father.” ***Festus.*** Children, in Lisping, doubled the Letters,  
aS ἄττα, τάτα, τάττα, or τέττα’ ἄππα, πάπας, πάππας, or  
πἀππος, ἄμμα, μάμμα. The ***Egyptians*** said ἄτ, τὰτ, and ώθ,  
θώθι Our ***Britons*** (Welsh) call Father and Mother by no other  
Names but ***T.at*** and ***Mam.***

**AT T** A is also a Name for fuch as have an infirmTread in their .  
Walk, LIMPERS. ***t( Acta,*** one who walks on the Fore-part  
" of his Feet. " ***Jsidorus. Atta,*** ό τοῖς ποσἰν ἀρχομενος περι-  
πάτεῖν, ***Pet. Glosse*** that is, " who first sets his Foot to the  
" Ground,'' from the Verb ἄττω, or her», to hop, ***or*** limp, ’  
which is a Contraction from ἀίωω, or ἀιττω. The following  
Passage of ***Festus*** has also a Relation to this Matter: "The  
***so Atta,*** says he, are such as, on account of some Defect in  
i€ their Legs or Feet, stand upon their Soles, and seem rather .  
"to touch the Ground than walk ; hence ***Quintius*** the Poet,’  
" who was remarkable for this Defect, got the Nickname of  
***" Alia,*** which always stuck by him." . .....

ATTAGAR, a Stone. ***Rulandus.***

ATTAGEN, ατταγᾶς, or άτταγἡν, an ***Asian*** Partridge,  
Commonly called a ***Francolin.*** The ***Greeks*** called it λαγώπους,  
(whence ***Lagois in Horace) Leporipes,*** or ***Leporarius^*** " Hare-  
". foot,” because of its downy Feet, wherein it resembled those  
Of a Hare. ***Pliny*** calls it ***Attagena Phrygia.*** To me, Ἀτταγἄς,  
seems Io be a ***Phrygian 3Ddt Pelas.gic*** Word, and to sound like  
Ἄττα γἄς, " the Father, or Chief, of the Country." for  
this Bird was in principal Esteem for its delicious Savour. But  
Ἄττα γᾶν, would be more like the ***Phrygian*** ; γᾶν, or γἄνος,  
is the ***Hebrew*** p ***Gan,*** the ***Syriac Ganna,*** and the ***Arabic  
Ginna,*** which was the Name they had for their Verdant Gar-  
den, or Paradise. Ip the same Form of speaking did the ***Phry-  
gians*** call a He-goat ἀτταγῶς, according to ***Arnobius,*** as being  
ἄττα γῶς, " the Father of the Goats ; " for the ***Scythian Cos***is. our Goat, and the ***Hebrew*** d γῆς. Of the ***Attagen*** thus  
speaks ***Martial .\* . . ' ' ’ 1 -***

***Inter Saporesfertur Alitum primus  
Ionicarum Gustus*** Attagenarum.

And ***Aristophanes*** in ***Athenaus ;***

. Ἀτταγἄς ἤδιστον ἐψεῖν ἐν 'Επινικίοις κρέας.

The Flesh of an ***Attagen*** is the sweetest that is dressed **at**"publick Feasts?\*

***Horace*** also ;

s ***-Nan Afra Avis descendat in Ventrem meum,  
set o Non*** Attagen ***Ionicus.***

...... . .. ... .. a . s .

- PZiny also says thus of it: Attagen ***maxime Ionicus celebratur,  
vocalis alias, captus obmutoscens, quondam existimatus inter rarar  
Aves c***. " The ***Attagen*** os ***Ionia*** is she most celebrated ; it makes  
" a Noife when at Liberty; hut is mute after it is taken.  
" Ponnerly it was reckoned one of the rarest Binds. " Ὁ ἀτ-  
ταγὴν γ.ονιστικός όρνις. τῶν γὰρἀρνίθων οσοι μὲν μὴ ‘ητητικοῖ, ἀλλ'  
ἐπίγβος, κονιστικοί» " The ***Attagen*** is a pulverarions Bind; for all  
" Birds that make little Use of their Wings in flying, but keep  
.. \*\* themfelves upon the Ground, are called ***pulvcrariousP Aihe~  
nous*** telis ns, that the ***Attagen*** is a littie bigger than a Partridge,  
and thus describes its Colours: Ὤλος κατἀγραφος τἀ περἰ τἄ  
νῶτον, κεραμῆ-τὴν χροαν, αίπσπυρίζιην μἄλλον. "Itis all oVer  
" the Back of the Colour of a Tile, only somewhat more  
" upon the Red. ” 7 ' . - -

By all these Circumstances, the ***Attagen*** insist he the same as  
onr Red-game, which.ischus distinguished

“ ATTAGEN, Offic. AldroV. Ornish. 2. 75. Bellon, des  
Oyse, 24I; Jonfi de Avilsc len. Gefn. de AVib. I 99. ***Atta.,  
gen Aldrovandi, Francolinc Italorum,*** Rail Ornith; 174. Ejusd..  
Synop;’.A.‘54. ***Actagmi Aldrovandi sou Francolino halorum.***Will Ornith. I25. ***Lagopus altera Plinii. An Gallina Cory.,  
lorum,*** Schw. A. in77. THE GOR-COCK, MOOR-  
COCK, or RED-GAME.

***; Oribasius seys. Medic. Collect. Lib. tri Cap.*** 3. that the Flesh  
of this Bird'is best in Autumn, And in the same Collections,  
***Lib. 1.*** Cap. 42. he says, it is of Very easy Digestion. -And. -  
***Actius*** in tins agrees with him. -

*Trdllian* recommends this Bind in. a Phthisis; *Galen, in*Nephritic Complaints; and *Avicenna* believed it increased the  
Seminal Secretions.

The Inside of the Gizzard of this Bird is extremely fragrant  
when fresh kill'd.

The Red-game lives principally on Vegetables, and uses but  
littie Exercise, scarcely ever being on the Wing, unless to avoid  
Danger: Hence it does not abound with highly exalted Salts.  
It is a very agreeable and wholsome Food.

ATTALUS, and ATTALICUS, are Names appropriated  
to some compound Medicines, mentioned by *Galen,* and trans-  
cribed from him by others.

ATTELABUS ARACHNOIDES.

**ATTELABUS ARACHNOIDES** *(AldrcfV. Jonstss.*

This as an aquatic Insect, which partakes of the Nature of  
the Spider and Grasshopper: The Head resembles a Grasshop-  
per ; the Eyes are prominent. The other Parts resemble **a**spider, but it has but fix Feet; it swims on the Water, or  
creeps upon the Earth. It is Ash-coloured.

. It is esteemed resolutive, when externally applied. *Lemery  
des Drogues.*

It is a sort of Locust. .

ATTENUANTIA. . ’

*Attenuating or inciting* Medicines are Of the utmost Im-  
portance in Physic, as a littie Reflection upon their Natures,  
Qualities, and Manners of Operation, will easily convince us.  
To this Class belong the *Roots* of White Burnet, Amm, Sweet-  
flag, Asarabacca, Wild-radish, Elecampane, Succory, Flo-  
Ten tine Orris, Solomon'S-seal, Swallow-wort. The *Hcrbs  
German* Leopards-bane. Brook-lime, Scurvy-grass, Water-  
cresses,' *Indian* Cresses, Dittander, Rosa Solis, Fumitory,  
Marsh Trefoil, the Lester Centaury, Hyssop, Germander,  
Chervil, Carduus Benedictus, the Lefler Houfleek, all the  
Species of Garlicks, Onions, and Leeks; Wood of Guaiacum  
with its Bark; of *Spices,* Pepper and Ginger; the *Seeds* of  
Mustard, ScurVy-grass, and Cresses; the *Gums* Ammoniac,  
Galbanum, Sagapenum, Opopanax, Myrrh, and Benzoin ; of  
*Chyrtical and Pharmaceutical Preparations,* Mercurius Dulcis,  
yEthiops Mineral, Flowers of Sulphur, alcaline fixed Salts, and  
the Salts of Vegetables prepared by incineration, but especially  
the Salts of Tartar and Wormwood; Salts also of a neutral  
Quality, such as the *Digestive of Sylvius,* my own aperient  
Salt, Sal Ammoniac, Sal Polychrestum, *Epsom* and *Scdlitx*Salts, Vitriolated Tartar, the *Terra foliata Tortari,* otherwise  
called *Tartarus Regencratus,* the *Arcanum Duplicatum,* a Solu-  
tion os CrabS-eyes, Nitre and Sal Ammoniac. Volatile Sub-  
stances also, such as the Volatile Salt of Sal Ammoniac, and the  
urinous Spirit of Sal Ammoniac; as alfoOxymel of Squills,  
acrid Tincture of Antimony, Essence of Gum Ammoniac, and  
of *Guiney* Pepper; Refin of Guaiacum, and the Syrups of To-  
bacco, Hedge Mustard, and the Fecula of Aron. Medicated  
Springs also belong to this Class, which, besides then diluting and  
aperient Natures, are also possessed of an attenuating Quality,  
such as the acidulated Springs of *Egra* and *Sedlitx,* and the  
*Caroline* Waters ; aS also Infusions in the Form *os* Tea, which  
in Consequence of the copious watery’ Principle they contain,  
possess a remarkably attenuating Quality, and are very effica-  
cious in separating and disjoining coalescent Molecules; and,  
in the last place, to this Class of Medicines belongs sweet  
Whey, which, in Consequence of the sweet, and subtile Salt  
with which it is impregnated, is of a highly detersive Quality,  
and wonderfully efficacious in opening the Excretory Ducts,  
χ Of the above-mentioned Substances, some act upon the fluid,  
and others upon the solid. Parts of the human Body. Such as  
operate upon the Fluids by immediate Contact, are very few  
in Number;-and indeed this Effect is only to he ascribed to  
watery Diluents, which are, without Doubt, of singular Effi-  
cacy in colliquating the glutinous and Viscid Humours; and to  
alcaline, fixed. Volatile, and nitrous Salts, which, if mixed with  
the inspissated Blood and Humours, especially when in a liquid  
Form, colliquate and attenuate them in so powerful a manner  
as to he perceptible even to the eye. All the other attenu-  
ating Medicines mentioned, act only upon the Solids by in-  
creasing their Tone, augmenting their Strength, heightening  
their contractile Force, and adding to the Elasticity and systolic  
Motion of the Vessels, by which means they press and shake  
their contained Juices more forcibly, and accelerate their pro-  
gressive and intestine Motions ; so that the tenacious and Viscid  
.Humours, being .thus frequently and forcibly carried through the  
minute and capillary Vesseis, are by that Very means divided  
and broken into smaller Globules; a Circumstance absolutely  
necessary for preserving their due Degree of Fluidity. Among  
those attenuating Medicines which operate upon the Solids,  
some produce their Effects by means of a' considerably fixed  
'and acrid Salt; such as the Roots of Arum’, White Burners,  
Asarabacca, *Florentine* Orris, and Solomon's-seal; the Herbs  
*German* Leopards-bane, Dittander, Rosa Solis ; aS also Pepper  
**and** Ginger, which,.though of a pungent Tasta, yet neither  
**yield an acrid volatile Oila nor a Water of an acrid Taste,**

when subjected to Distillation with Water, which sufficiently  
proves their fixed Nature. Others again of the attenuating  
Medicines, which operate upon the Solids, produce their Effects  
by means of an acrid subtile Volatile Salt, such as the Wild-  
radish. Elecampane, Cresses, Scurvy-grass, Mustard, and all  
the Species of Garlicks, Onions, and Leeks. Some *Attenuants*also operate by means of a neutral stimulating Salt, of winch  
Kind are thole neutral Salts, whose Acrimony, and irritating  
Quality, are not only discovered by the Taste, but also by their  
proving purgative or diuretic, when exhibited in pretty large  
Doses. Other Attenuante again, operate by means of an acrid  
Salt, impregnated with a large Quantity of sulphureous Parti-  
oles, which is evidentiy the Case with Gum Ammoniac, Sa-  
gapenum, Opopanax, as also Guaiacum and its Refin, which,  
hesides an acrid Salt, contain also an Oil, winch they yield in  
great Abundance when subjected to Distillation. And, in the  
last pisce, some *Attenuants* operate by means of a subtile pene-  
trating and metallic Salt, such as Mercury, especially Mercu-  
Tins Dulcis, and .ZEthiops Mineral.

*Attenuating* and *inciting* Medicines are of very extensive Use  
in the Practice os Physic, and come under disterent Denomi-  
nations, according to the different Effects they produce. Thus,  
when tenacious and Viscid Juices not only stagnate in the Ca-  
vities os the Vesseis, but obstruct the minute Ducts os the Vis-  
cera, and Emunctories, these Medicines by'their *incidingznd  
attenuating* Quality, discharge the Humours, and remove the  
Obstructions; for which Reason they may not improperly he  
called *Aperients.* They also deserve the Name of *Antiscorbu-  
tics,* and Sweeteners of the Blood ; for since the Purity and pro-  
per Temperament of the Vital Juices depend upon the due *Se-  
cretion* and *Excretion* of every thing superfluous and recremen-  
titious in the Constitution ; and since the necessary Degrees of  
*Secretion* and *Excretion* are intercepted by the minute Ducts of  
the Glands and Emunctories heing blocked up by thick and Vifcid  
Juices; 'tis therefore obvious, that such Medicines aS *attenuate*the inspissated Humours, and remove the Obstructions, must  
be Sweeteners of the Blood, and excellent Remedies against the  
Scurvy, in which the Humours have evidentiy lost their due  
Temperament, and are become impregnated with heterogeneous,  
viscid, saline, sulphureous, and acrid Particles. Now, since  
*attenuating* Medicines produce *so* great a Variety of different  
Effects, 'tis highly proper we should know whet Species of  
*Attenuants* are best adapted to such and such particular Dis-  
orders.

The Intention therefore of distblving and *attenuating* yisoid  
Crudities in the Stomach, and *Prima Via,* is excellentiy an-  
swered, by the Roots of Arum, White Burnet, and Sweet- flag;  
by Pepper, Ginger, depurated Sal Ammoniac, Vitriolated Tar-  
tar, *Arcanum Daplicatum,* the digestive Salt of *Sylvius,* my  
aperient Salt, Salt of Wormwood, the simple Spirit of Salt, or  
Spirit of Salt dulcified, as also the aperient Tincture os *Moebius..*And when crude and unconcocted Humours are to he evacuated  
by Stool, this intention is very well answered by the neutral  
Salts, especially those os *Sedlitz* and *Eps.om,* and the *Sal Poly-  
chrestum* exhibited in pretty large Doses, and in Conjunction  
with a sufficient Quantity of a watery Vehicle.

When Viscid Humours, occasioning Disorders of the Breast,  
are to be *attenuated* and expectorated, the intention is most  
effectually answered by the Roots of Elecampane, and *Floren-  
tine* Orris, by Rosa Solis, Hyssop, Germander, Maiden-heir,  
Gum Ammoniac, Myrrh, Benzoin, Sulphur, Balsam of *Peru,*Nitre prepared with Antimony, the *Terra foliata Tartari,*otherwise called *Tartarus Regencratus,* Oxymel of Squills, a  
Solution of Crabs-eyes in distilled Vinegar, and the Syrups of  
Tobacco and Hedge-mustard.

When the Mass of Bloed is tainted with thick and tenacious  
Sordes, and the Emunctories are by that means obstructed,  
and the Humours Contaminated by a saline, sulphureous, and.  
scorbutic *Dys.craso,* the most efficacious of the *Attenuants* are,  
the Root of .the Wild Radish, ScurVy-grass, Water-cresses,  
Indian Cresses, Dittander, Brook-lime, the lesser Centaury,  
Marsh Trefoil, Carduus Benedictus, Fumitory, the lesser  
House-leek, Mustard, Gum Ammoniac, Sagapenum, Myrrh;  
the Oil of fix'd Nitre per Deliquium, Oil of Tartar per Deli-  
quium, a Solution of Nitre, my temperate Elixir; acrid Tin-  
dime of Antimomr, Essence of the Woods, Spirit of Sal Am-  
moniac. Salt of Wormwood, with Citron Juice ; as also **the**Salts of the medicated Waters of *Sedlitx* and *Egra, -*

When grumous or coagulated Bloed, occasioned by Blows  
or Contusions, is to he attenuated, and again dissolved, the  
Intention is admirably answer'd by the Root os Solomon's  
Seal; by the Herbs German Leopard'S-bane and Chervil, Vi-  
negar distill'd with Crabs-eyes, the *Terra foliata Tortari,* and'  
Nitre prepar'd with Antimony.

i In' Cases where the Lymph has acquir'd a preternatural  
Thickness and Viscidity, especially from a Venereal Taint, **the**Curative Intention is best and most effectually answer'd by  
Guaiacum, Soapwort, acrid Tincture of Antimony, Mercu-  
**rim** Dulcis, and ZEthiops Mineral, which, wherr cautiousty

add skilfully used, is of singular Efficacy in resolving and atte-  
nuating the viscid Juices impacted on the Glands arid Liver.  
*Haffman, Vol.* I. *Sect.* a. *Cap. 4.*

ATTENUATIO, Attenuation. See **ATTENUANTIA;**

ATTICUS, Ἀῆικὸς. *Attic,* of *Attica, Athenian.* The  
*Attic* Honey is frequently mention’d by Medicinal Writers as  
the best.

ATTICUM, ἀἠικὸν, should he the Name of a Pleister, by  
the Use *Hippocrates* makes of it in the fourth Book of Epide-  
mini, where he says, *a certain Persen had an Ulcer in the Leg,  
and anointed it with Atticum, uriixM. 'urileusv* is also sometimes  
ufed in an Epithet for ἀγτοῦον, or χὑτρμ, and signifies an *Attic*- Vessel.

*Attic* Wax is mention’d by *Scribonius Largus.*

ATTILUS. A River Fish, very common in the *Fo,* not  
uhllke the Sturgeon. The Flesh is flabby, and not very agree-  
able. .

ATTINCAR VENERIS. The Albification of Copper,  
in order to transmute it into Silver.

ATTINGAT. The same as Flos AEris. See AEs.

ATTINGIR, An Earthen Box. *Rulandus.*

" ATTONITUS MORBUS, An Apoplexy. See Aeo-  
**RLEXIA.**

\* ATTRACTIO, Attraction, Drawing.

' ATTRACTIVUM, Attractive. *Paracelsus* gives the **sol-**lowing Account of bis SFECrFIcUM **ATTRACTIVUM.**

’ It *attracts,* says be, every thing superfluous in the Body, and  
draws out of it every thing of a hurtful Quality; for some  
*attractive Specifics* are in their own Natures fo exquisitely cal-  
culated to operate on Flesh, that they will *attract* an hundred  
Pounds of it, in the fame mariner as a Loadstone does Iron.  
It happen’d in out own Days, that an *Attractive* of this Kind

- drew a certain Man’s Lungs up into his Mouth, by which he  
had the Misfortune to be suffocated. Another was also so un-  
lucky, as to have the Pupil of his Eye drawn from its natural  
Situation to his Nose by the fame Means, after which there  
. was never, any Possibility *of* restoring it; *for* there are not

Only *Attractiores* accommodated to Iron, hut also to Wool,  
Herbs, Flesh, and Water , for I myfelf sew a Pleister which  
attracted as much Water as was sufficient to sill a Cistern ;  
and the Water flow’d from it just as if it had fallen from the  
Top of some House.

' In like manner. Lead, Tin, Copper, Silver, and Gold,  
may be attracts! by certain Compositions of *Attractive! and,*by thefe very *Attractive!,* Branches may be torn from Trees ;  
and, which is still more furprising, a Cow may he carried up  
into the Air.

For this Reason we are to apply some Medicines of an *attra-  
ctive Quality,* in order to extraci from the Body everything of  
a hurtful and corrupt Nature, that what is prejudicial may  
he separated from what is profitable. These *Attractiores* are to  
he apply’d upon an Ernunctsry in the Part affectsd, or upon  
an Ulcer which supplies the Place of an Emunctsry ; or, if a  
Gland should present itself, it is to be open’d like an Ernun-  
ctsry , for I know from my own Experience, that an *Attra-  
ctive* of this Kind has extracted and eliminated the Matter,  
which occasioned a Plague, in a more effeolual manner than on  
this Occasion it may feem proper to mention. No Patient,  
. however formidable his Distemper might have been, ever died  
by having this Medicine administer’d to him. The following  
is a Receipt for preparing this *Attractive* r

Take of the Quintessence of each of the Gums, one fourth  
Part ; of Magistery, one half that Quantity ., of fiery Ele-  
ment of Amber, one Pound ; of fiery Element, Mastich  
and Myrrh, each one fourth Part and an half; and of  
Element of Scammony, ten Ounces. Of all these make  
a Cerate, with Wax, Gum Tragacanth, and Turpentioe,  
to he ufed in the Manner above directed. *Paracelf.  
Arckidax. Lib. Sept. . s*

: Notwithstanding the Gravity and Ain of Importance which  
it is sometimes expected a Physician should assume, as there is  
no Crime, or even indecency, in Laughing, I have inserted the  
preceding Paragraph from *Paracelsus.*

*Attroctivus* is also apply’d to any Remedies to which the Fa-  
oulty of drawing or attracting is attributed.

ATTR ACTORIUS, Attractive j endow’d with the Power  
Of attracting.

ATTRAHENS, is ofed much inthe same Sense as the pre-  
ceding\*

ATTRITA. Galis from Attrition, or rubbing one Part  
against another. See **INTERTRIGO.**

ATTRITIO. A superficial Galling of the Feet, Thighs,  
of any other Part, by Walking, or otherwise:

*Attrition* is also a Word much us’d in Medicine and Philo-  
sophy, to express the rubbing two Bodies against each other,  
so as to wear away their Surfaces, or to excite Heat, without  
any Loss of Substance. Or it is in general a rubbing together.

ATTY-.ALU. The *Indian* Name for the *Ficus Mala-*

*bar easts, folia oblongs acuminate, fructu vulgari aeintAc.* RarI  
Hist. t

ATUREB. *Pjdandus* explains this, if it may he call’d art  
Explanatiori, by *Vitrum Aosaasne ,* bur does not tell whet *Aza-  
tsetse* is ; neither does *Castellus. . .*

ATYPOS, ἀτυπος, from α Neg. and τὑπος, a Form; of  
Tenor. Erratic, irregular. .It is apply’d to Diseases which  
have no Regularity in their Periods. ISaIso imports a Defor-  
mity of the Limbs. But ἀτυποι, Atypoi, from α Neg. **κηδτὐπτω.**to strike; signifies People who, by forne Defecti.in the Organs  
of Voice, cannot strike the Air so as to articulate certain  
Sounds. . ... .........

ATZOYATL. The *Mexican* Name for the *JIAirabilii  
Mixicana,* the Marvel of *Mexico,* which *Ray* fays is a very dif-  
ferent Plant from the Marvel of *Peru. Pan Hist. Plane.*' AVACCARI. .... - ;.

*Avaccari, (Garcia)* is a. little *Indian* Tree, the Leaves,  
the Flowers, and the Fruit of which resemble, Myrtle,  
but a great deal more astringent. It grows on Mountains,  
and in the Province of *Malabar. , ... .*

They esteem this very much in the. Country inhere it grows,  
for inveterate Dyfentcries proceeding from a cold Cause. *Lie:  
mcry des -Drogues. . .* ’ Ἀ - '

AVANACU. See **CADEL-AVENACU. .**

AUANSIS, ἀυανσις, .from ἀυω, to dry. Exsiccation in ge-  
neral, but properly of Plants thro’Age. ... - s -

AUANTE, ἀυαντὴ, or ἀυαψὴ, derived from the same Verb  
as the preceding. It may he translated, *the dry Disease. Hip.,  
pocrates,* in his second Book *Ac Morbis,* nives the following Ac-  
count of it, - .

The Patient can bear neither Abstinence nor Exting. Wberx  
Fashing, he has a Rumbling in his Belly, with a gnawing Pain  
in his Stomach, and vomits up Variety of Matters, as. Blle,  
Saliva, Phlegm, and an acrimonious Mattei; and after Vo-  
mitiog seems to be a little easier. After Exting he is molested  
with Eructstions, and an inflammatory Heat and Redness. Hs  
always fancies he has occasion to make a plentiful Stool; but,  
when he is upon the Seat, discharges nothing but Wind. He  
is afflicted with a Pain of the Head, and a Sense of Pricking as  
with Needles, in different Parts of his Body. His Legs feerns  
heavy, and grow feeble and extenuated, and he becomes very  
weak.

in this Case, a Purge must he first given, .and afterwards a  
Vomit, and the Head in partioular ought to be purged. The  
Patient is to abstain from sweet, oleous, and fat Kinds of Food,  
and not indulge himself in Drinking. After Meas, .provoke.  
Vomiting with the Juice of *Ptisan* ; and; if the Season will  
permit, after drinking Asses Milk, or Whey, let him take a  
Vomit or a Purge, as the Physician shell think most statable to  
his Cafe. If it be Spring or Summer, let him bathe in cold  
Water r is it he Autumn or Winter, let him ufe Unctions;  
Walking; and moderate Exercise ; but if he be too weak to  
hear Exercife, let him take a journey : His Diet must he cool-  
ing and laxative ; but if the Belly be costive, you are to open  
it with an emollient Clyster. ' This is a Chronic Disease, and  
does not forsake the Patient 611 Old Age, and then either takes  
its Farewel, or accompanies him to his Grave; *Hippocrates,  
nturi rissar. Lib.* a.

This Distemper is, by *le Clerc,* placed among those which  
have not preserved the Name by which *Hippocrates* called them,  
but which may be known by the Accidents which accompany  
them. This, by the Description, the above-mention’d Author  
takes for Hypochondriacifm. .

AVANTUR1NE, is a reddish or yellowish Stone, cover’d  
all over with Sparkles which referable Gold, which make it  
look agreeable to the Sight. There are two,Species of these,  
one natural, and the other artificial: The natural is found in  
many Parts of *France,* They mix it in Powder, which they put  
upon Paper to render it shining.

The artificial is made by Vitrification, or by mixing Sparkles  
of Copper with Glass, whilst it, is in Fusion.

It is used by Enamellers, birr I don’t know, that it is employ’d  
in Medicine.

AVARAMO, TEMOi The Name of a siliquofe Tree,  
which grows in the *Brastls. ...*

The Bark is externally of a cineritious, and internally of **a**deep-red Colour, and is **the** only Part of the Plant used by the  
Skilful for Medicinal Purposes, the’ the same astringent Qua-  
hues are fay some ascribed to.its Leaves; for the Bark, which  
is of a bitter Taste, whether reduc’d to a Powder, or boiled  
- and .us’d by way of Fomentation, happily cures inveterate and  
obstinate Ulcers, and has heen found to core Cancers them-  
selves by means of its remarkably cleansing and drying Na-  
ture.

Besides these Purposes, ’tis also made Choice of on account  
. of its effectsally astringent Quality, for Bathe design’d to  
strengthen and invigorate the muscular Parts os the Body,  
when weaken’d, or too much relax’d. *Bay* says it is'much  
ufed by the Courtezans for contracting the Pudenda. *Pali  
Hist. Plant.*

AUCHEN, *durstr.* The Neck. I . \_  
AUCHMOS, ἀυχμὸς,-from ἀυω, to dry. It imports Wea- .

' ther which is extremely hot, sultry, and squalid. The *Latins*transiate it by *fqualcr. Hippocrates* frequently uses this Word.

AUCTIO, Augmentation, Accretion.

AUCUPAUS SORBUS, and AU CUPARIA, are Names  
for the Ornus, or Sorbus Sylvestris. *.Blancarde -. :.*

AUDACIA, in a Medicinal Senfe, is that Sort of Bold- i  
nefs and Audaciousness, which we meet with in Deliria and  
Madness. It also signifies Impudence, which *Hippocrates* ad-  
vises a.Physician not to he guilty of. : - . .

AUDE; ἀ.υδὴ, the Voice. See Vox. .... - :

AUDITORIUS, Auditory. Thus there is the *Meatus*

*Andiiorius,* the Auditory Passage ; .and *Nervus Auditorius,* the  
'Auditory Nerve. See AUF.Is. - . -—

AUDITUS, the Seofe of Hearing. See AURrs. .  
AVELLANA, Offic. *Corylus silvestris.* Ger. 1250. Emac.

I438. Raii Hist. 2. I379. Synop. 3. 439. Mer. Pin. 30.  
C. B. Pin. 418. Merc. Sou- I. 3I. rhyt. Brit. 3I. Tourn.  
Inin 582. Elem. Bon 453. Boerh. Ind. A: 2. I76.. Dill.  
Cat. Gissi 35. Biixb. 86. Rupp. Flor. Jen. 265. *Corylus  
seu Flux Avellana silvestris, J.* B. r. 269. Park. Theas. I 416.  
Chab. 38. *Nux Avellana fylvestris,* Jons. Derain. IIa. The .  
HAZEL. *Dale. - , ... .*

*- Miller* takes Notice of sin Sorts of Nuts, the first of which  
is the preceding mention’d by *Dale,* which he calls the *wild.  
Hazci-riut. '*

The second is the *Corylus sativa, fructu albo minore, five  
vulgaris,* C. B. The SMALL-MANURED HAZEL-  
’ NUT' . . .

The third is the *Corylus sativa,fructu rotunde maximo,* C. Β.  
The LARGE COBNUT. . . .

The fourth is *sut Corylus sativa, fructu oblongo rubente,* C. B.  
The RED FILBERT.

’ The fifth is the *Corylus stativa, fructu oblongo rubente, pelli-  
cula alba tecto,* C. B. The WHITE FILBERT.

- Ths sixth is the *Corylus Hispanica, fructu majore angulose.*

Pluit. Alm. ' σ— ’

ς The first of these Trees is common in many Woods in *Eng-  
land,* from whence the Fruit is gather’d in Plenty, and brought  
*to London* by the Country People. . - -

The second and third Sorts are planted in Hedge-rows, in  
' moist shady Places in Gardens ; but the Fmit is much better,  
and in greater Quantities, when they have an open free Air,  
and are not suffer’d either to grow too thick, or be overhung  
with other Trees.

The fourth and fifth Sorts, that is, the red and white Fil.  
herts, are mostly esteem’d for their Fruit, being much sweeter,  
and their Shells much tenderer.

The sixth Sort is annually brought' from *Spain* in great  
Plenty, and fold in *London* all the Winter Season, from  
which Nuts there have been-many Trees railed in the  
*Engiise* Gardens ; but I have not yet seen whether they prove  
the same with the Nuts sown.

- Every body knows, that the *Hazel,* or Nut-tree, never  
arifes to be a Tree of any great Magnitude, shooting forth  
from the Root a Number of long, fmooth, tough, and pliable  
Branches, bearing large, round, rough Leaves, indented about  
the Edges, before whose appearing, early in the Spring, there  
come forth on the Branches, a great many long, loofe *Iuli* or  
*Catkins.* The Nuts grow two, three, of four together, on  
one Stalk, each cover’d with a membranous Hush, open and  
jagged at the Top: When rice, the Shell is herd and brittle,  
having a sweet Kernel. This Tree grows every-where in the  
Woods and Hedges.

I know hot of any great Use-thet is made of any Part of  
this Tree in Medicine. Some account the *Iuli* and Nut-shells  
to be restringent or binding; the Kernels are hard of Digestion,  
and stuffing, causing Shortness of Breath and Wheeling., the’  
an Emulsion made of them with Mead is commended for an  
old dry Cough. *Miller's Bot. Oof . -*

You are to ctiufe such Filherts as are large, full-grown, and  
each having a Kernel that is almost round, reddish, full of Juice,  
os an excellent Taste, and not Worm-eaten.

Filberts "are more nourishing than Nuts; they are by some  
' esteemed pedtoral.. .

They are windy, and hard of Digestion.

7 They contain a middling Quantity of volatile and essential  
Salt, much Oil and earthy Parts.

The moderate Ufc of this Fruit agrees at all nines with  
every Age and Constitution, provided there he a good Sto-  
-rnach.

REMARKS.'

The Filbert is a Fruit well knownthey are of a disserent  
. Bigness, grow, upon a common Shrub in Hedges and Woods,  
and the fame is also planted in Gardens.

- Filherts, as west Nuts, contain a great Quantity of Oll,  
and the same is easily extrained. in the mean rime, Fil-  
." herts **have a more** agreeable **Taste** than Nuts,-because rheis

**Salt is not so sharp as thet of Nuts, and because it is also  
.closely united to the oily** Parts.

Filberts are pectoral, and nourishing, because of their oily"  
Parts 5 they are also of a binding Nature, by reason of their  
earthy. Principles, which communicate a greater Consistence  
to the Liquors,; and swallow up the over-abundant Moistures  
that loosen the solld Parts. In the mean while they are hard  
of Digestion, when immoderately used, because of their solid  
and earthy Substance. - , - -

The Husks or Covers of the Filberts are astringent, and pro-  
per for binding the Body, but provoke Urine.

They cover Filberts with Sugar, and make Comfits of them  
of an excellent Taste ; they are commonly used for a Deft  
sert, and help Digestion. *Lemery on Foods.*

- Nuts and Filherts will purge People, when taken in consi-  
derable Quantities.

The Cream of these;Nuts is good in the Stone and Heat of  
Urine. Emulsions may be made of them. *Quercetan* gave a  
Dram of the Powder of Nutshells, mixed with an equid Quan-  
tity of prepared Comi, in a Glafs of the Water of Car-  
duus Benedictus, or Corn Poppy, in ί the Pleurisy. *Mar-  
tyn's Tournefort. ' "*

AVENA, Offic. βρώμος, *Dioscorides. Avena vesca,* GeI.  
68. Emac. 75.? Park. Theas. I I34. Mer. Pin. I3. *Ave-  
na alba,* J.B. 2. 432. Raii Hist. 2. I 25 3. Synop. 3. 389.-  
Chub. I 76. *Avena vulgaris,* Merc. Bot. 2. 16. Phyu Brit.  
I4. *Avena vulgaris seu alba,* C. B. Pin..24. Theat. 469.  
Hist. Oxon. 3. 209. Tourn. Inst. 5I4. Elem. Bot. 4I5.  
Boerh. Ind. A. 2. I6I. Rupp. Flor. Jen. 244. Buxb. 34.  
OATS. *Dale. \_ . . ..*

This Grain grows not to be so tall as Wheat or Rye, but it  
is fuller of Knots or Joints ; The Leaves are like Wheat, and  
it bears on the Top a loose Panicle of several distinct Grains,  
standing on long slender Foot-stalks; the Grain is longer, sten-  
derer, and smoother than Barley, cover’d with a loofe Husk  
or Skin: It is sown in *March* or *April.*

*Oats* are restringent, and drying ; and Oatmeal is of great  
Use both in Health and Sickness, being a wholsorne and cleans-  
ing Feed ; Water-gruel, made thereof, being much used in all  
Kinds of Distempers. Oats fried, and put into a Bag, and ap-  
ply’d to the Side, are good to ease pleuritic Pains; arid to the  
Belly, help the Colic, and Pains in the Bowels. *Miller Bos.  
Offic. - ‘*

As for unprepafd Oats, they are only used for seeding Cat-  
tle ; but when reduced to what we call *Oatmeal,* for which  
. Purpose the largest and best Oats must be chosen, they may he  
made into Cakes and Gruels, which are very agreeable, and  
excellent for People in Health ; as'alfo for such as labour under  
Pains of the Breast and Throat, especially if Sugar-candy, Con-  
serve of Violets, Currans, or Figs, are added to them. They  
render the Body soluble, and evacuate the glutioous Humours,  
which, prove offensive to in Some affirm, that they breed  
Worms ; which, may nevertheless be prevented, by preparing  
them with Anise or Fenel-seed, Oatmeal Cakes cure Belly-\_  
aches and Fluxes, and are esteem’d good for "such as labour  
under Consumptions, Impostumations, or Pains arising from  
the Stone. *Pliny, L.* IS. *Fl. Hi. C. s’],* informs us, that the  
*Germans* eat no other Cakes than those made of Oatmeal; and -  
Experience teaches us, that Children brought up with it gene-  
rally become very robust, and heve a fresh lively Colour, *Theod.  
Tabem. Hierbar. L.* I. *Sect. .j. C. 2.1.* and *Joan. Gusers,'Thb.  
Aied. S. Medicin. Domest. Tab.* 6O. In many Parts they make  
not only *Bread,* but *Ale,* of Oatsand a few Grains, eaten  
rough, are said to cure Heart-burns. The Bread is a coarse and  
het Food, of a disagreeable Taste, hard Digestion, and a con-  
stipatiog Quality, *Galert. L.* I. *de Aliment. Fac. C.* 14. ss.  
*Eraser. de Re Gib. Li* 5. *C.* 2o. *Cland. Deodar. Pantls. Hyg.  
L.* 2. *C.* 2..' It is nevertheless very good for rendering People,  
that are too fat and corpulent, lean, and reducing them- to a  
more moderate Size. *Cardan. L.* 8. *Subtil,* affirms, that, of  
Oats,, *slum MusetnAtes* make an Ale, or Drink, which is of a  
hot Nature, and fo strong, that it intoxicates fooner than the  
richest Wines. Oatmeal, used in Emulsions, is serviceable in  
Paroxysms of the Stone.. Decoolions of Oats, in Conjunction  
with Piohy-water, are good against Fevers, according to *G. Hi  
Vclseh. Chil.* I. *Exct. Cur. et Obf.* 643.

. Oatmeal, boil’d to a considerable Consistence in Water, and  
apply’d to hot Tumors and Fistulas, disposes them to heal; and  
-if mix’d with Butter, cures fcald Heads. *Oats* and *Cumin,*put into a Bag, and apply’d hot to the Belly, give Ease in the  
- Colic, and Disorders of the Matrix, *Cafp. Hoffman, in Coast!. a  
L. Scholz, edit. L.* 3. *Const* I4. Some add j uniper and Bay-  
berries, and Sale ’Tis here proper to observe, that a Medi-  
cine may be prepar’d of Horse.dung, which is of admirable  
Efe in the Colic, Jaundice, Pains ariling from the Stone, acute  
Pains of the Sides, and in expelling the Secundines. A Poultis-  
-of Oatmeal, prepar’d with Water and Powder of Marshmal-  
lows, is of singular Use in removing Roughness and Chaps in  
**-the** Nails, *Ger. Blaftus, Med. Driiverf\_ pare.* 4. *C.* 3. The

Strain of Oats, is used in such Baths as are-intended to ease the  
Pains arising from a Stone in the Kidneys. If the Hairs are  
washed with a Lixivium of it, it renders them of st yellowish  
Colour. This Straw is very good, for Cows, and they eat it  
with Pleasure, but ’tis not so proper sorHorses, since it *genes.*rally gives them Pains in the Belly. Is a Horse is afflicted with  
a Suppression of Urine, boll Oats in Wine, and give him them,  
to he eaten pretty- hot, and his Disorder will very roan'he re-  
moved. When Fowls cannot lay Eggs, Women give, them  
roasted Oats to be eaten, with, a View to remove that Defect.  
*Barehol. Tiorn, Botonolcg.*

Oatmeal, made into flat Cakes, is the common Food of the  
ordinary People in *Scotland, JVales, Derbyshire,* and the *North  
of England.* But the Dough, of which these Cakes are made,  
- is.fermented generally with Barm, which takes away all. Visci-  
dities, renders it more acescent, and consequently very proper  
Aliment for People who use much Exercise, and eat a great deal  
of Animal Food.' Oatmeal unfermented, like the Meal of all  
farinaceous Seeds, is fubjedt to generate Viscidities in the Sto-  
mach and Intestines ; but is more proper when an.Alcaleseence  
prevaiis in the Constitution, than if fermented.

The famous Remedy for acute Distempers, and which has  
very undeservedly been the Subjeci of much Ridicule, I mean  
*Water-gruel,'* is made of Oatmeal boil’d with Water. This is  
endow’d with the same Medicinal Virtues as the *Ptisan* of *Hip-  
pocrates* ; and, as an Acescent Aliment, is very good, when -  
there is a Tendency to an Alcaline Putrefaction, which is the  
Case in most acute Distempers. Farinaceous Vegetables, by  
being digested, and boil’d in Water, grow more acescent. See  
that Part os the Article ALcALi, which specifies the Regimen  
proper in acute Diseases.

*. . Dale* rakes Notice of another Species of Oats, which is the  
**AVENA NIGRA,** hid. Med. re.. Chonr. 746.. Raii Hist. **2.**

I253. Synop. 3. 389. Med Pin. 13. J. B. 2. 432. Chain I76.  
**C.** B. Pin. 23. Theau 472. Tourn. Inst. 5I4. Elern. Bot.  
4I5. Bcsrin Ind. A. 2. I6I. Hist. Oxon. 3. 209. Buxb. 35.  
*Avena femine nigro,* Rupp: Flor. Jen. 244: BLACK OATS."

It is sown in Fields, , for the Use of Horses as well as the  
preceding. .

. There are some other Species of Oats mention’d by Botanic  
Writers, possess’d os much the same Virtues as these above-  
mentioned. See AEGiLOps:

AVENQUA, the *Portuguese* Name for the *Adianthurn Bra-  
Jilianun,* Maiden-hair of *Brastl.*

AVENZOAR, the Name of an *Arabian* Physician.\*

*Avenzaar,* tho\* his Age cannot be precisely determin’d,  
seems to heve lived after *Avicenna.,* and we are sure be lived  
before *Averrhoes,* who more then, once gives him a very high  
and deserved Encomium, calling him *admirable, glorious, the  
Treasure of all Knowledge,* and the most *Supreme* in Physic,  
from the Time of *Galen* to his own. He was born, or at  
least resided much, at *Seville,* the Capital of *Andalusta,* and the  
Seat then of the *Mahometan* Chaliph. He lived to I35. began  
to practise at 40, or, as others fay, at 20; and had the Advan-  
tage of a longer Experience than almost any one ever had; for  
he enjoy’d perfect Health to his last Hour. He tells us him-  
self, how he was imprison’d, and barbaroufly treated, by *Holy,*-the King’s Constable in that City, the’ it appears, by his own  
Account, that once, either before or after, he cured that Mi-  
‘ Dister’s Son of a Jaundice. He wrote a Book call'd *Tbnijscr,*that is, one which contain’d all Rules sot Medicine and Diet in  
most Distempers ; and this Work, indeed, shews him to have  
been a Man of Business and Experience. It appears too from  
hence, that he had the Care of an Hospital, and was employ’d  
Often upon the *Alirarnamolin’s* Commands.

He is reckon’d, by the Generality of Writers, an Empiric.,  
tho’ I can’t imagine, why they pitch’d upon him for this Cha-

racter, which suits him, I think, less than any of the rest of  
the *Arabians:* One would naturally suspect by this, that they  
bad never read further then his Preface, which, indced, does  
contain a Collection of Receipts used by himself and others.  
For, not to menrion that he was bred in a Physical Family, ( his  
Father and Grandfather being herb Practitioners, whom he  
always remembers with great Gratitude and Honour) we heve  
his own Testimony, that he had a regular Education ; and that  
he not only learnt what properly belongs to a Physician, hut,  
cut os a great Desire os Knowledge, every thing besides which  
relates to Pharmacy and Surgery. He lays it down for a Maxim,  
That Experience chiefly is the right Guide and Standard of a .  
warrantable Practice, and must absolve of condemn him, and  
«very Physician, both in this Life and the next. . He expresses  
himself more remarkably in another Place, -where he is speak-  
ing how indifferent it is to apply this or that Oil in the Cafe of  
some Tumors ; and observes by the way, that the Art of  
Curing is so little to be attain’d to, by any logical Distinctions,  
or sophistical Subtleties, that long Use, assisted by a good Judg-  
ment, can only furnish out so extraordinary a Talent. For.  
Example, fays he, is any one would take it into his Heed to  
refine, and nicely distinguish, about laxative Medicines, and pre-  
tend to find out the proportional Quantity and Quality of any

Purge,, th as to square it.exactiy to the .Constitution of -the **Pae.-**tient, and the Nature of the Humours to be discharged, and  
calculate it fo as not to he even a Hair over or under; such Spe-  
culations, in his Opinion, contribute very little to form a Judg-  
ment about any right Method os Cure. And here, no doubt,  
*he. IuriAlkindus* in his Eve, who wrote a fanciful Treatise in this..  
way, concerning the Doses and Qualities of Medicines'.

.And’this Author is so llttio addicted to Quackery, and has so  
mean an Opinion of a here Receipt, that he exclaims against  
the Impudence of. old Women in this Point, as well as rejects  
the idle Superstition of Astrologers. It is a very remarkable  
Story he tells of himself, in a particular Case, where he was at  
a Loss how to proceed, and ash’d the Opinion of several other  
Physicians to no Purpofe; At last he took a Journey to the  
Town where his Father lived, and desired his Advice. The  
old Man would give bain no direct Answer, but slew’d him a  
Place in *Galen,* and bid him read that; if he could find cut the  
Cure of the Distemper hy it, it was very well; is he could not,  
he bid him never think of making any Proficiency in Physic.  
The Advice succeeded, so that the Patient was cured, to the  
Satisfaction both of the Father and the Son. And, indeed,  
throughout all this Work, he professes himself so much of the  
Dogmatical or Rational Sect, which was directiy opposite to  
the Empirical, that he has a great deal of Reasoning about the  
Causes and Symptoms of Distempers; and as in his Theory he  
chiefly, if not only, fellows *Galen,* so he quotes him, upon all  
Occasions, oftener than the rest of the *Arabians* do. *Freind’s  
History of Phyfsc. .*

The Works of *Avenujoar,* or *Abhomeron Aten-Zoar,* are, «.  
**TIBER THBrsiR DaHALMODANA VAHALTABIR,** which  
imports *Rectistcatio Medicationis et Pegs minis.*

This was printed at *Venice,* 1496. in *Fast* and again at the  
same Place, I5I4. *Fol.* And in 1531. in 8*va.* with the Addi-  
tion of his *Antidatarium,* and the *Colliget* of *Averrhoes. Van.  
der Linden, de Scriptis Medicis.*

AVERICH, Sulphur. *Johnston.*

AVERRHOES lived not long aster *Aventooar* ; for he inti-  
mates hirnfelf, that he was acquainted with his Sons. He died  
*sp Morocco, A. Hi* 595. as some fay, or 603. as others. He  
made a great Figure in Lise; and his Works made him cele-  
heated over all *Europe,* after his Death. He was a Native of  
*Ccrduba,* bred to the Law, tho’ he afterwards studied Mathe-  
matics and Physic. *J. Leo* gives a long Account of his Grand-  
father, that he was sent by his Countrymen, who intended to  
revolt, to offer the Crown to the Emperor of *Morocco* ; that  
he was by him constituted Chief of the Priests, and great Judge  
of the Kingdom of *Corduba, e.* Post which he enjoy’d a long  
while, and was succeeded in it by his Son, and his Grandson. -  
Our *Averrhoes* was famous for bis Liberality and Patience, and  
for his continual Application to Study ; and, without doubt,  
he was a Man of strong natural Parts, and a very subtle Rea-  
soner. He bad the Title of *Commentator* given him, from the  
many Volumes he wrote upon *Aristotle,* and was call’d, besides,  
the *Soul of Aristotle.* In Physic he wrote a Book, at the Mira-  
marnolin of *Morecca's* Command, which goes he the Name of  
*Colliget,* divided into seven Parts, containing the whole Science  
of Medicine, and is chitfly a Compendium, as he owns himself,  
os what had been faid by others, with some Additions of his  
own. He begins with the general Rules os this Art, and fo  
descends to Particulars, and therefore, be fays, nobody will  
be able to understand what he wrote, but who is well versed  
in Logic, and natural Philofophy: Accordingly he mixes more  
of the *Aristotelian* Philosophy with his Theory of Physic, than  
the other *Arabians* do ; for winch Deleft he finds Fault with  
the wise Men of *Andalusta.* And this, I fuppofe, he must he  
understood to mean, when he fays, he shall ufe Expressions, and  
explain Things, which his Predecessors never did, and shall  
deduce every thing from the Roots of natural Science, in  
Anatomy, he professes he gives us nothing new ; and, indeed,  
he -here entirely copies after *Galeni* And as to the practical  
Part of this Work, there is scarce any thing in it but what is  
borrow’d; and tho’ he speaks several times of his own Expe-  
rience, yet he does not seem to heve been much conversant in  
Practice, as indced we may guess he was not, from the History  
of his Lise. However, there is one Observation he makes,  
which I find no-where else, that the same Person can have **the**Small-pox only once. The chief Design, indeed, of thisTrea-  
tise appears to be, to lay down right Notions concerning the  
speculative Part of Physic, in which there were, in his Time,  
great Disputes; and therefore, as he follows much the same  
Method as his Master *Aristotle* observes in the History of Ahi.:  
Inais, so one great Aim be had in writing this Book, was to  
reconcile the Opinions of that Philosopher with those of *Galen,*an Author who seems to have the second Place in his Esteem.

Mr. *Bayle* has collected a great many Passages out of Au-  
thors, relatiog to *Averrhces -,* and as the feems never to have  
been acquainted with the Original, he follows these Authors  
impllcitly, who often mislead Idin; As where he tells us, from  
*Champerius,* that he was a bitter Enemy to *Avicenna* ; and that,  
for this Reason, he avoids ever naming" him', which he docs in

this Book osten, and in his Metaphysical Disputations; not to  
mention the Comment he has writ exprefly upon' that Author's  
*Cautica.* And as to being his Enemy, as is here suggested, if  
we look into this very Comment, we may easily he convinced  
of the contrary ; for he thinks this Treatise of *Avicenna* one of  
the best Introductions to Physic which eVer appear'd; and there-  
fore because it was concise, and sometimes wanted an Explana-  
tion, he undertook the Task himself; and to shew his Candour,  
even when *Avicenna* seems to lay down some wrong Positions, he  
explains in what Sense they should be understood, so as to he  
consistent with Truth; as particularly in the Doctrine about  
bleeding old Men, (which he distinguishes perfectly right) and  
the making Use of subterraneous Caverns. The last Rule par-  
ticularly, he fays, would not so well suit his Climate, winch  
was the fifth, that is, *Spain*; but might he Very proper for the  
fourth, winch was hotter, and where *Avicenna* lived. Whet  
Mr. *Bayle* recites from Mr. *Pas.quicr,* about *Averrhoes* bleeding  
his Son at three Years old, is equally a Mistake ; for *Averrhoes*himself telis us, that it was *Avenzoar* who used this Practice in  
the Case of his Own Son. So where he quotes Mr. *Petit* for  
saying, that *Averrhoes* never gave any Medicine to the Sick,  
and that he owns aS much himself, is directly contrary to what  
this Book will inform uS ; tho' I agree, that it is probable he  
was no Very great Practitioner.

Mr. *Bayle* wonders why Mr. *Herbelot* is so short in his Ac-  
count of this famous Author ; and I should wonder why Mr.  
*Bayle* is so prolix upon the same Head, did I not consider, that  
he picks up a sew odd Stories, which have been handed about,  
Concerning his Irreligion, particularly the celebrated Saying he  
is charged with. *Sit anima niea cum Philosophis* ; a Saying winch, .  
perhaps, there was no more ground to fasten upon *Averrhoes,*than any of those Particulars I have mention'd. This Writer  
has, with no littie Pains, amass'd together all that he could  
rneet ’ with, upon this Article, in modern Authors; and, in a  
more emphatical manner, inlarges upon whet he found quoted  
from the Disputations which this *Arabian* wrote against *Algascci,*a’Man samous in the preceding Century, for being the Founder  
of a Sect call'd the *Motaxelas,* and who died *A. Hi* 5O3. a  
Piece finely written, as he telis us from *Rapin*; but, in his own  
Opinion, Very pernicious, in this are contain'd a great many  
Speculations concerning the Soul, consonant to the Doctrine of  
*Aciflotle*; amongst the rest, the Unity of the Intellect is ex-  
plain'd : From which Mr. *Bayle* would infer, that he was a  
very impious Person,’ and one who must of course maintain the  
Mortality of the Soul ; and consequently deny any future Re-  
wards or Punishments. Why he should be so fond of drawing  
*Averrhoes* into these Opinions, I will not take the Liherty so  
much as to guess ; only give me Leave to observe, that if he  
would have consulted the Author himself, instead of the Col-  
lectors he here quotes, he would have sound a Very different  
Account of his Notions: For, in one Dissertation, *Averrhoes*asserts, that the Soul is not material; and in another, that it is  
immortal. So usual is it with these Compilers of secret Histo-  
ry to run into infinite Mistakes, merely hecause they take every  
thing at second-hand, and upon Trust; whereas would they .  
have been at the Pains to go to the Fountain-head, and cast an  
Eye only upon the Original, their Memoirs would have been  
much more exact.

But, to digress no further, as there is littie material in ’ this  
Author, *Averrhoes,* relating to Practice, *I* shall not trouble you  
now with any further Account os him, or his Works. I shall  
only mention, that he takes Notice of *Alkindus,* the Author of  
a Treatise .now extant, *concerning the Preportion ana Doses of  
Compound Medicines’,* and who, perhaps, might be the same  
1 with the famous *Peripatetic* of that Name, in the Reign of *Al-  
ma non.* In this Book he endeavours to reduce the Qualities of  
‘Medicines to the Rules of *Arithmetic* and Music ; but *Averrhoes*justlychinks he refined too much, and that it is not only a  
Work os mere Speculation, built upon no solid Ground, that  
is, that of the Quality of a Medicine in the Compound in-  
creasing always in a double Proportion, but owing altogether  
fo his mistaking the Sense of *Galen* upon the same Subject.  
*Freintsts History of Physic.*

The Works of *Averrhoes,* are.

*Collectanearum de re Medica Sectiones tres, a Juhanne Bru-  
yerino Campegia Latinitate donata, Lugdun. tSSsp. Fol.*

*Auerrois Opcra. Vinetiis apudfuntas,'* I552. *Fol.*

His *Colliget,* and Commentaries on the *Cautica* of *Avicen..  
na,* and some other Pieces, are extant with the Works of *Aven,  
iooar, Fence.* I496. *Fol.* and *Lugduni,* I53I. *Suo.*

His Book *De Venenii* was printed *Lugduni,* I5I7. *4to.*

And his Commentary upon *Avicenna, Vinetiis, I*484- in *Fol.*and again at the same Place, 1555. *Fol. Pander Linden de  
Scriptis Medicis.*

AVERSIO, Aversion. It signifies the diverting a Flux of  
Humours from one Part to another, whether by Revulsion,  
Derivation, or Repulsion.

*Aversio* also implies a Nausea, or Inappetency j and some-  
times is used to express that Recession of the UteruS from its

Proper Place, which the Antients imagin'd tO happen in Hyste\*  
ric Disorders.

\* AVES, Binds. The Natures of these, consider’d as Ah-  
ment or Medicines, are express'd under their different Names.

*Avis Medica,* is the Peacock.

*Aves,* or *Aviculae Cyprice,* are perfum'd Candles, or Sticks  
of Wax.

*Aves* also is a Word made Use os by some of the Enthusiasti-  
cal Chymists, to express, or rather to conceal, their Meaning ;  
in which they have effectually succeeded. *Rufandus, for* Exam-  
ple, thus defines the *Avis Horrnetis : AEs Hermetic, avis volans,  
quia in altum evolat, et tamen iterum in terram proptcr nutrimenta  
descendit : unde nutrix omnium est terra. .*

The *High Dutch* Interpretation of the same Author is rather  
greater Nonsense than the *Latin y* for which Reason the Reader  
need not regies, that I have not tranflated it.

AVEVETL, and AHOEHOETL, are *Indian* Names *for* the  
*Abies Mexicacua. Raii Hist. Plant. -*

AU GA RES; ἀυγαρἐς, a Name of an Ingredient in a Clyster  
for the Coeliac Passion, in a Prescription given by *N. Myrepsus,  
Sect.* I7. *Cap.* 45. I don't know, that it has eVer been disco-  
ver'd what it means. The Interpreters keep the Word, and  
confess they do not understand it.

AUGITES, άυγίτης, the Name of a Gem, which *Pliny  
says* many People esteem to be not very different from the Cai-  
lais. It is said to he of a pale Green, and not so Valuable as a  
Topaz. *Pliny* says the Callais imitates the Sapphire, but is  
more white.

AUGMENTATIO, Augmentation, Increase, Accretion,  
Growth. .

AUGMENTUM. Diseases, especially Fevers, are divided  
by Authors into *the Beginning, the Augment* or *Increase, the  
State* or άκμὴ, and *the Decline.* The *Augrneatiern,* therefore, is  
that Part of the Disease which lasts from the Beginning, or first  
Seizure, to the *State,* or till it arrives at its utmost Vio-  
lence.

AUGURISTA. By the explication which *Castellus* gives  
of this Word, it should signify whet we call a Conjurer. A  
Person who pretends to shew preternatural Images in Looking-  
glasses. Crystals, and Water; and to foretel Events by the  
Singing and Flight of Binds.

AUGUSTUM, A specious Epithet given to some Medicinal-  
Compositions by their Authors or Descrihers.

AVICENNA.

\* The samous *Avicenna,* the Son of *Halt.,* was hern at *Bochara,  
in Choras.an,* about 98o. He studied Philosophy very early;  
fo that, if we believe *Sorsunus* his Disciple, he was Master of  
*Euclid,* and other mathematical Books, when he was but six-  
teen Years old; and soon made such Proficiency in the Study  
of Physic, as to become very celebrated for his Skill in that  
Art. The *Arabic* Writers tell this Story of his Sagacity, That  
he found out, by the False, the Distemper the Nephew of Co-  
*bous* laboured under, which was Love; and that by a Stratagem  
he made use of, .he discovered likewise the particular Object of  
his Passion: The Case is so parallel, that one would he apt to  
think, they stole this Account from whet *Appian* relates os  
*Erasistratus,* in a like Iliness of *Antiochus,* the Son of *Seleucus.  
Avicenna* lived, for the most part, at *Ispahan*; he is represent-  
ed by them, as one Very much addicted to his Pleasures, so  
that he fell into several Sorts of Distempers ; and it was a Say-  
ing, they tell us, in those Times, *That all his Philosophy could  
not make him moral, nor all his Physic teach him, how to preserve  
his Health.* He died in the 58th Year of his Age, or rather,  
if we calculate to a Nicety, the 56th, in 1036. at *Medina ;*and was buried in the City of *Hamadan.*

History tells us, that he made a Very considerable Figure in  
the World ; so that by some of hiS own Countrymen he is  
reported to have been raised up to the Dignity of *Viscir*; from  
whence, I suppose, some more modern Writers have fancied,  
that he was really a Prince; and others have given out, that  
he was a King; though they do not agree, whether he reign-  
ed in *Corduba,* or *Bithynia.*

This is the Account the heft Historians give of the Origin  
and Age of *Avicenna,* though he is supposed by some, without  
any Ground, to have heen a *Spaniard,* and by others an *Egyp-  
tian.* It is amazing, where *Neander* Could pick up the Mate-  
rials to furnish out such a Romance, as he has made of this  
Writer's Life: He telis us, very formally, that he was hem at  
*Edessa,* the Capital of *Commagena,* in I I45. that he went from  
thence to *Alexandria,* where he studied under *Rhasces* ; and that  
afterwards he travelled into *Spain,* where he was the Disciple  
of *Averrhoes,* at *Corduba.* But it is no new thing in this extra-  
ordinary Author, to write as many Falsities and Contradictions,  
as he does Pages.

*Avicenna* compiled a large Work, which he called the *Canon i*and the Fame of this Book was so great throughout all *Asia,*that it was epitomiz'd and commented upon by several other  
*Arabians,* in the twelfth and thirteenth Centuries; and, even  
long hesore this, it began to prevail fo much in *Europe,* that

there was no other Doctrine taught in the Schoofs of Physic .  
and it happened to be the good Fortune of *Avicenna,* to con-  
tinue his Empire there, till the Restoration Of Learning,

One would naturally expect , to find somethina in this An:,  
thor, answerable to such a Character but thoiwhI have very  
often looked into Iris Writings upon several Occasions, (for y0Uwon’t suppose, I believe, that I heve gone through him in any  
regular Course of Reading) I could meet with little Or nothin;  
there, but .vchat is taken originally from *Galen,* or what se  
least occurs, with a very small Variation, in *Rbnzes,* or *Holy  
Abbas.* He in general seems to be fond of multiplying the Signs  
ofTistempers, without any Reason; a Fault too mncti imi-  
rated, as Errors are the easiest to be followed, hy Our modern,  
W risers of Systems. He often indeed sets down forne for essen-  
tial Symptoms, which arise merely by Accident, and have no  
immediate Connexion with the primary Disease itself. And,  
to confess the Truth, if’one would chuse an *Arabic* System of  
Physic, that of *Holy* seems to be less confused, and more intel-  
ligible, as well as more consistent, than this Of *Avecenna.  
Freind’s Hist, ofPhysic, Vol. i.-*ε'- 'The Works of *Avicenna* were printed at *Venice,* I596. in  
Folio.

The *Liber Canonis, de Medicines Cardialibus, et Cautica,*together with forne other Pieces, were printed *Venetiis, apud  
Juntas,* 1544. et *sSSS- ’n F°l. Basella, april Johan. Hir-  
vagium,* I556. *in Fol. Venetiis, apud Octav. Scotum,* I3oo.  
*in ate. Groninga,* I629. *in* ιτεΛο. : ‘

*Canon Medicinae. Venetiis, apud Juntas,* 1595. et I 60S.  
*in Fol. 2 Vol. apud Vine. Valgristum,* I564. *in Fol.* 2 *Vol.  
'Ibidem,* 1580. *in tsto. Lcmanii, apud Alempceum,* I658. *in  
'Fol. Uratistaviae, Fol. per Petrum Kiastiriium.*

*Libra quinque Canonis Medicina Aben Ali, Principis Filii  
Sina, alias corrupteAvicenna. Arabice nunc primum impresse.  
Rama ex Typographin stAedicea, i^c^giinFel.*

*Libellus de removendis Nacumeniis, quae accidunt in Regimine  
sanitatis: Tractatus de Syrupa 'acetose, uno cum Syraci Medici  
expesitione in 2. et* 3. *pariem. 4. Fie.* I. *Can. Avic. et Ebenesi.  
super sumi. Venetiis, apud Dsrniiium'de Tridino,* I547. *in  
rnoj. Pol. ' -*

*De Corde, ejufque Facultatibus, Libellus, Job. Bruyerine  
Campegio Interprete. Lugduni, apud Nicol. Edvardum,* I559.  
*in* 8w.......

*De Animalibus, per M. Miso. Schstur ex Arabics ia Lati-  
num transtatus.* This is extant in Folio, without any Specifica-  
tion of rhe Time when printed, or the Place where. . c

*Canonis Libri* 3. *Fen.* I. *Tractatus quartus, in quo scribit de  
aegritudinibus Capitis, et noxa multa' illarum in functionibus  
senseis, et mnderaminis, five partis rectricis, a Johau-ne Quin-  
yuaborraeo Latine versus, et ad stdern codicis Hebraici correctus.  
Parastis, apud Marcinam Juvenem,* I572. *in* 8υο.

*Canonis Libri* 3. *Pen.* 2. *quae est de Aogultndiaibus Narvorum,  
a Quinquoborraeo Latine versa. A aristis, apud Mart, juvenem,*I57o. *in* 8υο. ' "

*Quarti Libri Canonis Fen. prima de febribus.- Patavii,* I659.  
*in loans.*

*. De Tinctura Metallorum Tractatus. \* Frcmcofurt. apud Cy-  
riacum Jacobicm,* I550. *in* 4ιο. . -.t

This is thought supposititious, as is the following:

*Chyndcus Liber, Porta Elementorum dictus. Bastliae, apud*

*Petrum Pernam,* I572. *in* 8υο. ;

AVICULAE HERMETICAE. The universal Salt, which  
*Sendivogius* fays is to he found in the Dew, is called by this  
Name in the *German* Ephemerides.

AVICULARIA SYLVII, a Name for the *Speculum Ve-  
neris majus,* a Plant; called otherwise. *The greater Venus’s  
Looking-gulse. -* .! «-.’ί-ς Μσι.Ι a-, -«n'o T.O yti—sri 0,'

AV ILA, is a Species of Apple produced in the *Indies.* It  
is larger than an Orange, of a considerable Size. It is of a  
round Figure, plump, and of a yellow Colour.1 It grows in  
these Colonies of *America* which belong to the *Spaniards,* upon  
a fort of Shrub, or creeping Plant, which adheres to the ad-,  
jacent Trees.. This Apple includes eight or ten flat orbicular  
Nuts, which have a small Cast of the Oval, and at one of their  
Extremities terminate in an obtufe Point. These Nuts, tho\*  
joined to each other, are yet easily separable. They are con-  
vex on one Side, concave on the other, almost as large as out  
half Crown, half a Finger’s Breadth in Thickness, covered with  
**a** moderately thick Park, which is herd. Of a woody Centex-  
ture, a little rough, especially on the convex Side, and of a  
yellowish Colour. Under this Bark is a tender, white, and  
hitter Almond, which is esteemed an excellent Medicine against  
Poisons, and Malignity of Humours. One or two of these Al-  
monds may be taken for a Dofe. *Lerners Traits srniversel de  
Drogues Simples.*

. AULOS, άυλὸς,-Properly signifies a Pipe, or Canal, Or Fo-  
ramen. In *Hippocrates de Mulierum Marble, Lib.* 2. it im-  
ports the exterior Foramen of, or Enuance into, the Vagina  
Uteri,. as ἐναυλεη, is the Vagina itself. . -

. AULos alsia signifies a Pipe to blow through. . . . .- ' ? . .

*Aulas, in Pliny,* is'a Shell Fish, which wh call the Seal\*  
lcp. -

AULISCOS, ἀυλίσκος. is a Catheter, or a Clyster-pipe. '  
. AVORNUS, -the ALNcs NIGRA, is thus called by *Cre-  
seentius.*

AVOSETA.

*Avofeta Italorum, feu Spintcago di Aqua,* is an aquatio Bird  
as large as a Pigeon; its Beak is four or five Inches long, black,  
turned up, ansspointed at the End. Its Head is blackish, **the**Body white, the Feet bluish, having the Toes j viced by Mem-  
branes ; the Legs are long: It is found in *Italy.* -The Fat is  
esteem’d very resolutive, emollient, and anodyne. *Lemery des  
Drogues. ‘ ’ ...... - . .... ......*

AURA.

*Aura dive Gallinasea, (Joastcny*

Is a Species of Raven of *Medico,* which, approaches the Size  
of a large Eagle ; the *Indians* call it! *TropHlotl.* Its Colour is  
black ; the Beak is made like a PerroqsietS ; the Forehead is  
covered with a Skin wrinkled without Feathers: It is armed  
with black crooked Claws This. Bird is common in *Flew  
Spain* ; it keeps at Night upon the Trees, i and upon the Rocks;  
but comes in the Day near the Cities ; it lives Upon Ordutc and  
Excrements. They fay, that the young ones arc white, but  
that they, blacken as they grow larger. They sty in Flocks;  
pretty high; they make no Cry, and are of a bad Smell. They  
contain a great deal^of volatile Salt and Oil. The Heart of  
thisEird, being drv’d in the Sun, invery fragrant. The Flesh,  
being eaten, is good for the Small-pox; the Feathers, burnt, arc  
- detersive, vulnerary, and proper to prevent the Hain from fall-  
ing off, if the Ashes are sprinkled upon the Flesh. *Limery des  
Drogues.*

AURA also signifies a Vapour or Exhalation, such as those  
which arise from Mephitical Caves..

J *Hilmant* speaks much of *sue Aura Vitalis,* which Teems to  
mean what others call the *Flusnrna Vitalis, Vital Plame.* Both  
ute mere Jargon,; and only mean Chimaeras existing no-where  
but in the extravagant Imaginations, of those who make ufc of  
them. - *s*

AVRANCUM, Egg-shells. *Rulandus.*

AURANTIA, a Fruit-tree, thus distinguished:

*MalstsAurantia,* OSc. Ger. I279. Emac. I463. Raii Hist.

2. I 658. *y^Malus Aurantia vulgaris.* Park. Theat. 1508.'  
*Malus Arantia major,* C.B. Pin. 436. *Aurantium, Mala Aran-  
tia,* Mont. Ind. 37. *e Arantia Malas,* C: Β. 1. 97. Chab. 5.  
*Aurantium vulgare,* FerI.Hesp. 377. Tourni Inst. 620. Elem\*  
Bot. 493. Boerh; Ind. A. 239: *Mala Aurantia,* Aldrov. -  
Dendr. 489: *Malus Aurantia vulgaris: major, suns. Denar.*-22. THE ORANGE-TREE. *.Hales . .*

This beautiful Tree grows to a pretty great Bigness in its  
native Places, having many Branches, the younger of which  
are of a greenish Colour, with several sharp Thorns growing on  
them; the Leaves are of a pale, yellow, green Colour, in  
Shape like Bay-leaves, each of which is set on a Foot-stalk in  
Shape of a Heart, of a pleasant fragrant Smell, when bruited :  
The Flowers grow on the younger Shoots among the Leaves,  
of a single Cup-fashioned Leaf, cut into five Parts, with several  
yellow *Stamina* in the Middle, of a fragrantodoriferous Smell;  
they are succeeded by large round Fruit, green at first, and of  
a reddish-yellow Colour, covered with a tough Skin or Peel,  
under which is contained the Pulp, coosisting of a great Num-  
ber of small *Vesicula,* full of a sharp Juice, (among which lie  
longish round Seeds pointed at both Ends) divided by a Skin into  
several Cloves, or Partitions.

' This Tree grows in Plenty in *Italy, Spain,* and *Portugal,*and hears Flowers' and Fruit all the Year ; hut the Fruit is  
chiefly gathered in *October* and *November.*

The Juice of Oranges is used as Sauce to whet the Appetite:  
It is cordial and cooling, good to quench Thirst, and serviceable  
ln burning Fevers; it is of great Use in the Scurvy, being fre-  
quently mixed among other Antiscorbutics. The Peel or Bark  
is cordial and stomachic, strengthens and warms the Stomach,  
prevents *Nausea* and Vomiting, and helps the Colic.

Officinal Preparations from *Oranges* are,, a Water distilled  
from the Flowers, the *Aqua Naphae,* Oss. a Conserve of the  
Peel, and the same .candied, and a Syrup of the Juice.

*N. B.* The *Sevil* Orange is only ufed in Physic, the *China*Orange being only eaten for Pleasure. *Millers But; Osts.*

This Fruit has different Names, fuch as the *Mala Arantia,  
Aurantia, Arangia, Mala Acirea, Chryscmelea, Poma Anaran-  
tia. Aurantia et Nerantia, (arangia,* or *Aurangia.* The Poets  
undoubtedly meant no more by the *Golden Aprils* produced in the  
Gardens of the *Hesperides,* than *Oranges,* which are the Fruit  
*of* this Tree. Thus *Virgil is* to be understood in thisLine :

*Aurea Mala decern mist; Ci-as altera ndttden. ,*

But fome of the Fruit differ very much in Taste from others:  
Some are very bitter, whilst others are sweet: Others again  
keep, as it were, a due Medium between sweet and bitter ;  
and.this\_last Son are justly.preferred: tothe others, not with

regard to the Peel or Bark, which, in Heat and Dryness, fur-  
passes that of the Lemon, but .with regard to the Qualities and  
Agreeableness of the Juice, winch is less cold than that of the  
Lemom Their V irtues are the same. with those of the Citron  
and Lemon; for which Reason, wo find, in some foreign Shops,,  
then Peel dried and preserved, a Water, a Syrup, an Essence,  
**a** Tincture, and a distilled Oil of Oranges ; but particularly  
we find the preserved Flowers, and a Water distilled from the  
Flowers. Fresh Oranges, if eaten, resist Putrefaction, and  
prevent the Scurvy. *Bald. Ransteus, de Scorbuto,* says, he knew  
forne who got entirely free from the Scurvy, only by the Use of  
Oranges, and their Peel. Z. *Riverius,* in his fourth Century,  
*Obs.* 84. makes Mention of a Shoe-maker, who had laboured  
under a Quartan Ague for near half a Year, and who was at  
last cured by the Use of Oranges, which he cut into small  
Pieces, and boiled in White-wine; by taking some of which  
for a few Mornings, his Disorder was removed. The Juice of  
fweet Oranges, exhibited with Syrup of Violets, is excellent  
for procuring Sleep in Fevers. *Jo. Camerar. Hirt. Med.*The Peel dried, reduced to a Powder, and drank *in* White-  
wine, Corroborates the Stomach, helps Digestion, procures an  
Appetite, sweetens a stinking Breath, and is serviceable in  
Swel.ings of the Belly, Colics, PainS which succeed Child-birth,  
Suppressions of Urine and the Colic. See *Ephem. N. C. Dec.*3. *Ann.* I. *Obs.* 35. This Virtue is still stronger in the distilled  
Oil, four or five Drops of winch are to be taken in Wine.  
*Dornin. Panarolus, Pent.* 2. *Obs.* 8. says, that the Oil expressed  
from Orange-peel, proves a very expeditious Cure in Fevers.  
The Flowers preserved with Sugar are an excellent Cordial, and  
esteemed very good in burning and pestilential Fevers. The  
Water distilled from the Flowers has a very fragrant Smell, and  
is good in malignant and Virulent Fevers; for it promotes a  
plentiful Diaphoresis, comforts the Heart, refreshes the Vital  
Spirits, gives Ease in the Colic, allays Pains of the Stomach,  
and kills Worms. It is also applied to the Pulse with a View  
to comfort the Heart. It iS elegantiy prepared in *Italy,* where  
it is called *Napha* and *Angelica.* See *Rated. Lib.* I. *de Mat.  
Med. Sect.* 6. *Cap.* 4 In *Spain* 'tis usually given to Women  
in herd Labours. It is also used with Success in Hysteric Fits,  
but must he mixed with Musk and Dragons-blood sor answering  
that Intention. *R. S'olenandr. Sect.* 5. *Consil. Med. τζ. L.  
River. Lib.* 15. *Prax. Med. Cap.* 6. *et Cent.* I. *Obsc. Med.* 65.  
94. The Water distilled from the Seed cures Pains arising  
from the Stone in the Kidneys. *Ferrar. Lib.* 4. *Hefpcr. Fol.*478. The Leaves, by means of a chymical Preparation, yield  
an Oil which is excellent in Cases where the Shin-bones are  
laid bare. The Seed resists Poison, and kilis Worms. The  
Leaves, if boil'd in Red-wine, and drank, put a Stop to the Ca-  
tamenia.

We may here mention the Poma Sinensia, the Mala Auran-  
tia Chinensia, or *China* Oranges, which are of late become  
well enough known, and are superior to the others in Delici-  
oufnefs os Taste, and bear the Name of the Country, from  
which they are imported to *Liston,* where they are now pro-  
duced in considerable Quantities as well as in *Spain.* Their  
Juice is much better adapted to the Intentions of Physic, but  
must not be taken in too large Quantities, especially by those  
who have cold and weak Stomache, in the Shops, they make  
of their Peel an Essence or Tincture, which is highly cordial  
and stomachic. *Barthol. Zorn. Botanolog.*

The Rind of the bitter Orange heats much.

The Juice of the sweet Orange, immoderately taken,  
weakens the Stomach, and causes Wind. AS for the Juice of  
the hitter Orange, it sometimes incommodes the Stomach and  
Breast, by a littie too rough pricking of those Parts.

The juice of the bitter Orange contains much Phlegm and  
essential Salt, and a little Oil.

The Rinds of the sweet and bitter Oranges agree at all times,  
in all Sorts of Ages, to Persons who have a weak Stomach, and  
thofe of a phlegmatic and melancholy Constitution. AS for  
the Juice of these Fruits it is Very good in het Weather for  
bilious Persons, and those whose Humours are ton sharp, and  
too much agitated.

**REMARKS. '**

Oranges are brought from several Parts: The best and the most  
in Esteem for a good Tasto, are those winch grow in hot  
. Countries ; not only because the Soil of those Places, having  
Store of exalted Sulphur and volatile Salts in it, communi-  
cates a great Quantity of the same to these Fruits, and gives  
them an agreeable Smell, but because the Heat of the Sun  
there digests, and more completely ripens their Juice, and  
gives them a more delicious Taste.

The Juice of the bitter Orange is sharp, because it contains  
much acid Salt in it, and heoaufe this Salt is but littie emba-  
rais'd with the ropy Parts; winch is the Reason it communi-  
cates almost all its Acidity to the littie nervous Fibres of the  
Tongue. As for the Juice of the sweet Oranges, as it con-  
tains less Salt than that of the bitter one, and as this Sait in

. hept under by a great Quantity of oily Parts, it is easy to he  
understood, that it Can make but a flight Impression on the  
Parts it touches.

They prefer the Juice of the bitter Orange in Medicinal Use  
hefore the other, as was before observed, for cooling and  
moistening, and mitigating Fevers; hecause this Juice has  
more of the Acid in it, and can more easily thicken the over-  
thinned Liquors, allay their Violent Motions, and keep down  
those sharp Humours, that throw them into an extraordinary  
Fermentation. *I suppose, by the hitter Orange,* Lemery *means  
the four.*

*Of the* **ORANGE-y LOWER.**

You ought to chuse such as are white, 'fair, os an agreeable  
Smell, and fresh gathered.

They cheat the Heart and Brain, promote the Menses,  
strengthen the Stomach, and assist Digestion.

The immoderate Use of this-hot Flower renders the Bile more  
sharp, and by that means may caufe different Diseases.

It contains much exalted Oil, Volatile Salt, and Phlegm.

The Orange-flower agrees at all times with aged, phlegmatic,  
and melancholy Persons ; as also with those that have a weak  
Stomach, and do not easily digest their Food.

**REMARKS.**

The Orange-flower is used in Food and Physic; they preserve  
it whole, and, by distilling, extract from it a Liquor os a .  
Very pleasant Smell, and much used in Cordial, Hysteric, and .  
Cephalin Potions. Its pleasant Smell proceeds from those  
Sulphurs and Salts contained therein, which are elevated with  
the Liquor, and mix therewith. The Orange-flower helps  
Digestion by its Volatile Principles, which divide and attenu-  
ate the gross Parts os the Aliments. It also refreshes the  
Heart and Brain, and promotes the Menses, hecanse the same  
exalted Principles revive the Mass of Blond, increase the  
Quantity of the Spirits, and rarefy the Viscous Juices which  
obstruct the Course of the Blood. *Lemery on Foods.*

AVRARIC, Mercury.

AURATA, a Fish, called *The Gilt-head,* or *Piscis Sacer:*According to *Athenaus,* it was esteemed very delicious Food by  
the Antients. It is called also *Orata.*

AUREA ALEXANDRINA, an Opiate or Antidote, in-  
Vented by *Alexander.* See **ALEXANDER.**

AURES, the Ears. See **AURIs.**

AUREUS, a pompons Appellation for many Medicinal Com-  
positions, either on account of their Costliness, Efficacy, or be-  
cause Gold enters their Composition.

AUREUS RAMUS, is the Art of making Gold.

AUREUS is also a Weight equal to a Dram and an half.  
*Castellus.*

AURICHALCUM, Brass,

Is a Mixture *of Copper* and Lapis CalaminariS, which is put  
together in Fusion by a Very Vehement Fire, in a Furnace made  
for that Purpose.

The Discovery was made by the Alohymists, who, endeavour-  
ing to turn Brass into Gold, found the way to give it a yellow  
Colour. The CalaminariS Stone embarastes the acrid Salts of  
the Metal to that Degree, that it makes no Impression on Li-  
quors, as the Copper does. Besides, as the Calaminaris Stone  
costs but littie, so the yellow Brass is Cheaper than the natural.  
*Lemcry des Drogues.*

In making of Medicines great Care must he taken, that no-  
thing acid is put into a naked Brass Vestel, hecause Acids dis-  
solve Brass, and that renders the Medicine emetic.

AURICOLLA, the Gue, or Cement of Gold. It should  
seem to signify the same as CHRYSOCOLLA, which see.

It is mentioned in the *Tor ba Philosophorum. Theatr. Chyme  
Vol.* 5.

. AURICULAE *Cordis,* the Auricles of the Heart. See .  
**COR.**

AURICULA *fudae, et Fungi Sambuci,* Offic. *Fungus  
membranaceus auriculam referens, jive Sambucinus.- 'C.* B. 372.  
Rati Hist. I. IO6. Synop. I8. *Fungus membranaceus auri-  
culam referens.* Hist. Oxon. 3. 642. *Fungus Auricula Juda,  
coloris ex cineraceo nigricantis, perniciosus, in Sambuci caudice  
nascens,* J. B. 3. 840. *Fungus Auriculae fudae, coloris ex  
cineraceo nigricantis, perniciosus.* Chab. 5S8. *Fungus Sandu-  
cinus, sive Auricula Juda,* Ger. Emac. I48I. *Fungus Sam~  
buci, vel Auricula Juda,* Sterb. 256. Tab. 27. *Hi Fungus  
Sambucinus,* Park. I320. *Agaricus Auriculae surma.* El. BoI.  
44I. Tourn. Insta 562. Poerh. Ind. A.-I4. Buxb. 7.  
*Agaricurn Auricula forma,* Mich. Nov. Gen. I24. Tab. 66.  
1. *Peziza Auriculam reiferens.* Dill Cat. I 95. JeWS-  
EAR. *Dale.*

**AURICULAE JUDAE,** or *Jews Ears,* are a fort of Fungus,  
or a Species of Agaric, winch is found adhering to the Trunk  
**os** the Elder-tree. This is of the Figure, and oftentimes **the**Size, of a Man's Ear;, but they are sound larger and smaller.  
**It is of a** membranous, cartilaginous, and pliant Substance, like

Leather, of a blackish-grey Colour. It contains a great deal  
of Oil and Volatile Salt.

It is Very resolutive, proper for Tumors, and for Inflamma-  
tionS of the Throat, and other Parts, being broken and applied  
thereto. It should he used internally with Caution, for it is  
**a** fort of Poison. *Lemery des Drogues.*

It is directed to be boil'd in Milk, or macerated in Vinegar,  
in order to make a Gargle for the Throat, in a Quinsey: And  
sometimes it is infused in Water for the same Purpose, with  
other Ingredients.

*Dale* fays it is astringent.

AURICULA LEPORIS. See BUPLEURUM.

AURICULA MURIS, Mouse-ear. See PILOSELLA.

AURICULA URSI, Offic. *Auricula Ursi store luteo.*Ger. 64O. Emac. 784. Rail Hist. 2. IO82. Elem. Bot. IoO.  
Tourn. Irish I2O. Boerh. Ind. A. 2OO. J. B. 3. 4go. Chain  
492. Rupp. Flor. Jen. I4. *Auricula Ursi store stavo.* Parks  
Pared. 239. *Auricula Ursi, Sanicula Alpina,* Mont. Ind. 37.  
*Sanicula Alpina lutea,* C. B. Pin. 242. Hist. Oxon. 2. 557.  
YELLOW BEARS-EARS. *Dale. .*

This Herb grows in great abundance at or about *Utrecht, in  
Stiria, Tyrole, Savoy,* and *Switzerland,* about the Middles, and  
on the Tops, of large Mountains. It bears large thick green  
Leaves upon its Stalks, at whose Tops there are Flowers of  
different Colours. The Inhabitants of *Utrecht* call it *Primula  
odorata,* on account of its agreeable Smell. The' this Herb is  
hot ordinarily kept in the Shops, it may nevertheless be rank'd  
among the Vulneraries, and is of singular Service, both for in-  
ternal and external Purposes. It abounds with a mild, tem-  
perate, and glutinous Juice, which, when express'd, may he  
apply'd to old Wounds, with a great deal of Success: When  
mix'd with Ointments and Plaisters, it is os great Service in  
Ruptures, *Jo. Camerar. Hire. Med.p.* 25. Four or fix Spoon-  
fuis of the Water, in which the Herb has heen boil'd, taken  
every Morning, cure Coughs and Ulcers of the Lungs. Such  
aS go a-hunting on the large Mountains, where 'tis to he found,  
use its Root against Vertigoes. See *Conr. Gefner. de Lunar.  
Harb. p. M.* 3am *Sennert. L.* I. *Pract. p.* 2. *C. An* TheJuice  
of the Flowers removes Spots of the Face, and beautifies the  
Skin ; and with the same Intention some distil a Water from it.  
*Barthol. 7som, Botanolog.*

AURICULARIA, Ear-wort, Marlow, or *Cylonian* Plant.  
It is a Species of Mint. See MENTHA.

AURICULARIUS, belonging to the Ear. *Auricularius  
Medicus* is a Physician for the Ears.

AURIGA, a sort of Bandage for the Sides, described by  
*Galen.*

*AMsuiGsu* also signifies the fourth Lohe of the Liver. *Castellus.*

AURIGO, the Jaundice. See **ICTERUS.**

AURIPIGMENTUM, Offic. Matin I367. Ind. Med.  
i7. Worm. 28. Kentm. Iy. Agricol. 592. *Auripigmentum  
luteum, Pddacyi.* Mus. Metall. 353. *Arsenicum croceum Auri-  
pigmentum,* Chari t. Foss. I2. *Arsenicumstavum Anripigmentum,*Mont. Exot. I3. ORPIMENT. . \_

The Orpiment of the Shops, *Auripigmentum in Latin,*ἀῤῥενικὸν *os Dioscorides,* άρσενικὸν of *Galen, Narueth os Sera-  
pion, Tsarnick Ars.ar* of the *Arabians,* and *Orpiment* or *Orpin*in *French,* is an Arsenical Juice, in squamous or foliaceous  
Glebes, like the *Lapis Specularis,* the *Squama,* or *Strata,*belng easily separable from each other.

Orpiment is of three Kinds ; one Of a Gold Colour; the  
second *of* a deeper Red, or Cinnabarine Colour, mix'd with  
Yellow; and the third greenish and yellowish, mix'd with a  
large Proportion of Earth, and therefore the least Valuable.  
These three Kinds are found in the Veins of Gold, Silver, and  
Copper Mines ; but we know not what was the other Kind of  
Orpiment, mention'd by *Dioscorides.*

Orpiment is of an acrid Taste, soluble **in Oil,** and instam-  
mable by Fire, emitting a thin Flame with a great deal of  
Smoke, smelling strongly of Sulphur or Garlick. This Smoke,  
if collected, turns to yellowish Flowers like Sulphur, and a red  
or blood-colour'd Mass remains behind; which, when cold,  
concretes into a hard solid *Regulus,* like Cinnabar, called by  
feme Red Orpiment, or Realgar. Is the Orpiment he kept in  
a subliming Vessel for a long time on the Fife, the’ whole Mass  
is raised to the upper Part of the Vessel, and there concretes  
into a beautiful, red, pellucid Substance like a Ruby, only a  
small Quantity of Metallic Earth remaining at the Bottom.  
The first Fumes, which come from , this Regulus, will turn Cop-  
per white and brittle.

Orpiment therefore must consist of the same Parts as com-  
mon Sulphur, with some Mineral Particles mix'd with them;  
or it It composed of an acid Salt, entangled in Particles of Mer-  
**cury,** and of a bituminous Substance. Its corrosive Quality  
arises from the acid *Spioula* stack into the Partiales of Mercury j  
hut it has that Quality in a less degree than corrosive Sublimate,  
hecause of its bituminous Part. It is less inflammable than  
Sulphur, hecause the Energy of the acid Salts contain'd in it  
is weaken'd by the Mineral Parts ; and, from its Corrosive Qua-  
lity, it is deservedly reckon'd among Poisons.

It was antiently used by Physicians to eat away fungous  
Flesh, but is now laid aside in that Intention, Chymistry having  
furnished us with much better CathereticS. It is used some-  
times by Barbers, with a Mixture of Quick-lime, as a Depila-  
tory, to eradicate the Hairs of any Part of the Body; but *if*they let it lie on too long, it corrodes the Skin. Some Physi-  
cians recommend the internal Use of Orpiment, in Substance,  
in a purulent Phthisis accompanied with Expectoration, and in  
Asthmas. The Fumes of it may likewise be received at the  
Mouth in the same Intentions, and the *Chinese* reckon it among  
the Purgative Medicines. However, I cannot think the inward  
Use of this Medicine in any respect allowable; for it is a strong  
Poison, destructive to the Nerves, and accordingly is sound by  
Experience to bring on very’ terrible Symptoms, such as Spasms  
in the Hands and Feet, Stupors and Contractions, cold Sweats,  
Palpitations of the Heart, Paintings, Thirst, inward Burning,  
Vomiting, Belly-ach, Erosions, Violent Pains, and Death it-  
self, according to the different Doses of this Poison ; and in the  
Bedies of such as die in this manner, the CEsoph-gus, Stomach,  
and Intestines, are found to be inflamed, corroded, and perfo-  
rated in several Places. . .

The Antidotes for Orpiment, and all other Arsenical Sub-  
stances, are whatever is able to blunt the Acrimony of these  
corrosive Medicines; such aS Milk and Oil, drank in great  
Quantities, sat Broths, the juice of Mallows or Marshmal-  
lows, Decoctions of Flea-wort, and Linseed, Marshmallow-  
roots, and such-like. Orpiment or Arsenic, worn about the  
Neck like an Amulet, cannot be so hurtful as some imagine ;  
neither do we believe it of any Virtue in preserving against the  
Plague, or pestilential Diseases.

Of the *Lixivium* of Orpiment and Qtnck-lime is made the  
Sympathetic Ink, by the Effluvia of which alone. Letters  
written with Vinegar of Lead become visible ; and the Painters  
use it for Gold Colours, from winch Use its Name is derived.  
*Geofsiroy.*

AURIPIGMENTUM RUBRUM, REALGAR, which  
see.

AURIS, the Eat.

Every one knows that the *Ears* are two in Numher, that  
they are situated on the lateral Parts of the Head, and thet they  
are the Organs of Hearing. Anatomists commonly divide or  
distinguish the *Ear* into *external* and *internal.* By the *external  
Ear,* they mean all that lies without the external Orifice of the  
Meatus Auditorius in the OS Temporis; and by the *internal  
Ear,* all that lies within the Cavities of that Bone, and also the  
Parts that bear any Relation thereto.

The greatest Part of the *external Ear* consists of a large  
Cartilage, Very artificially framed, which is the Basis of all the  
other Parts of which this Portion of the *Ear* is made up. The  
*internal Ear* consists chiefly of several bony Pieces, partly form’d  
in the Substance of the Offa Temporum, and especially in that  
Portion of it call'd Apophysis Petrosa, and partly separated from,  
but contain’d in a particular Cavity of that Bone.

The *external Ear,* taken all together, resembles in some  
degree the Shell of a Muscle, with its broad End turn'd upward,  
the small End downward, the convex Side next the Head, and  
the concave Side Outward Two Portions are distinguish'd in  
the *external Ear,* taken all together, one large and solid, call'd  
in *Latin Pinna,* which is the superior, and by much the greatest  
Part; the other small and soft, call'd the *Lobe,* which makes  
the lower Part. We may likewise consider two Sides in the.  
*outward Ear,* one turn'd obliquely forward, and irregularly  
Concave; the other turn'd obliquely backward, and Unequally  
convex; for all *Ears,* which have not heen disorder'd by bind-  
ing the Head too tight in Childhood, are naturally hent for-  
ward.

The fore Side is divided into *Eminences* and *Cavities.* **The***Eminences* are four in Number, call'd Helix, Anthelix, Tra-  
gus, and Antitragus. The Helix is the large folded Border, or  
Circumference of the great Portion of the *Ear.* The Anthe-  
lix is the large oblong Eminence, or Rifing, surrounded by the  
Helix. The Tragus is the small anterior Protuberance below  
**the** anterior Extremity of the Helix, winch, in an advanced  
Age, is cover'd with Hairs. The Antitragus is the posterior  
Tuhercle, below **the** inferior Extremity of the Anthelix.

The Cavities on the sore Side are four in Number, the Hol-  
low of the Helix, the Depression at the superior Extremity of  
the Anthelix, call'd Fossa Navicularis; the Concha, or great  
double Cavity, that lies under the Rifing, term'd Anthelix, the  
upper Bottom of which is distinguish'd from the lower by a  
Continuation of the Helix, in form os a transverse Crista; and  
lastly, the Meatus of the *external Ear,* situated at the lower  
Part of the Bottom os the Concha.

The hack Side of the *external Ear* shews only one consi-  
derable Eminence, which is a Portion of the convex Side of the  
Concha, the other Portion being hid by the Adhesion of the  
Ear to the Os Temporis. This Adhesion hinders us likewise  
from seeing the Hollow answering to tho Crista, by which **the**Cavity of the Concha is divided.

I heve already said, that the *external Ear* consists chiefly.of a  
Cartilage, which is the Basis of all the other Parts. These  
other Parts are Ligaments, Muscles, Integuments, sebacedus  
and ceruminous Glands, Arteries, \reins, and Nerves ; but !  
do not rcckon among them a large Gland, call’d, by the *Greeks,*Paretis, because it lies very near the Ear.

The Cartilage of the *outward Rar* is nearly of the fame  
Extent and Figure with the large solid Portion thereof, already-  
mention’d ; but it is not os the same Thickness, being cover’d  
by integuments on both Sides. In die Lobe, or soft lower  
Portion of the *Ear,* this Cartilage is wanting. On the back  
Side, it shews all the Eminences and. Cavities on the sore Side  
in an opposite Situation, with refpect io each other,, except the  
Fold of the great Circumference; and it consists only of one  
Piece from that Circumference all the Way to the Meatus Ex-  
ternus, except at the two Extremities of the folded Part of the  
Helix, .where there are two fmall separate Portions connected to  
the great Cartilage only by the Integuments.

The cartilaginous Portion of the external Meatus Audito-  
rius does not make a complete Circle, but rather a shortTube,  
'in one Side of which there isji Break, and which terminates in  
an -oblique Border, fixed, to the Edge of the bony Canal by  
several small Inequalities, as by a kind of Ingralling; and from  
this Obliquity it is that the cartilaginous Border terminates  
downward, in a kind *of* Apex or Point. The lateral Break in,  
this Cartilage is betwecn the upper and back Part of its Cir-  
cumference, and on each Side thereof the cartilaginous Edges  
are rounded. There are likewise two or three other small Inci-  
sures in this Circumference, which, in regard to the Meatus,  
represent obliquely transverse Fissures. The anterior Fissure is  
in a.manner quadrangular; neither are the intcrmediate Parts  
always opposite to each other, for the uppermost is a little fut-  
thcr from the Os Temporis than the posterior.

The *external Ear* is fix’d to the Cranium, not only, by the  
cartilaginous Portion of the Meatus already mention’d, hut  
alio by Ligaments, which are two in Number, one anterior,  
the other posterior. The anterior Ligament .is strain by one  
Extremity to the Root of the Apophysis Zygomatica of the Os  
Temporis, at the anterior, and a little toward the superior. Part  
of the Meatus Osseus, close to the Corner of the . Glenoide  
Cavity ; and ry the other Extremity to the anterior and supe-  
rior Part of the cartilaginous Meatus. ::π . ‘....

The posterior Ligament is fix’d by one End to the Root of  
the Mastoide Apophysis, and by the other to the posterior Part  
of the Convexity of the Conche, fo thet at is opposite to the  
interior Ligament. There is likewise a kind of superior Liga-  
ment, which seems to be only a Continuation of the Aponeu-  
, rosis of the Frontal and Occipital Muscles.

Of the Muscles of the *external Ear,* some go between the  
Cartilages and Os Temporis, others are confin’d to the Carti-  
lages alone. Both Kinds-vary in different Subjects, and are  
sometimes *so* very thin, as to- look more llke Ligaments than  
Muscles. The Muscles of the fust Kind are generally three in  
Number, one superior, one posterior, and one anterior, and  
they are all very thin. The superior Musole is fix’d in the  
Convexity of the Fossa Navicularis, and of the superior Portion  
of the Concha *; from* whence it runs up to the fquamous Por-  
tion of the Os Temporis, expanding in a radiated manner, tho’  
not in the fame Degrees, in all Subjects; and is inserted prin-  
cipally in the Ligamentary Aponeurosis, which covers the poste-  
rior Portion of the Temporal Muscle.

The anterior Muscle is stnall, more or less inverted, and  
like an Appendix to the superior. It is fix’d by one Extremity  
about the Root os the Zygomatic Apophysis, and by the other  
in the anterior Part of the Convexity of the Concha..

The posterior Muscle is almost transverse, and of a consider-  
able Breadth, being fix’d by one End to the posterior Part of the  
Convexity of the Concha, and by the other in the Root os the  
Mastoide Apophysis. It covers the posterior Ligament; but the  
Division of it into several Portions, mention’d by some Author,  
seems to be merely artificial, that is, owing to Dissection.

The fmall Muscles, which are confin’d to the Cartilages, are  
only small Strata of Fibres, found on both Sides' of the Carti-  
lages. In many Subjects thev are of so pale a Colour, as not  
to look at all like Muscular Fibres. Of this Number are those  
which *Valsalva* discover’d in the different Cavities on the back  
Side of the Cartilage, and those sound hy *Santorini* on the Tra-  
gus, and along the convex Part of the anterior Portion of the  
Helix.

\_ The Skin of the *external Far* is, in general, a Continuation  
of that which covers the neighbouring Parts of the Temporal  
Region. The Skin on the fore Side of the Ear is accompanied  
by a very stnall Quantity of cellular Substance . and therefore  
we find all the Eminences and Cavities of' that Side distinctly  
mark’d upon it, as far as the Bottom of the external Meatus  
Auditorius. In whet I have said of the Skin, the Epidermis is  
likewife comprehended.

The back Side is cover’d by the Skin, continued from the  
fore Side; but as the Folds are there very close, st only passes  
**over them, except that Portion of the Concha which surrounds**

the Entry Of the Meatus Auditorias, and which is join’d to the  
Os Temporis, by means of the cellular Substance. The Hol-  
low of that common Fold, which lies hetween the Anthelix and  
Concha, does not appear on the back Side; for, as it is fill’d  
with the cellular Substance, the Skin pastes over is.

The Lobe of the Ear, or that soft Portion, which lies under  
the Tragus,Antitragus, and Meatus Auditorius, is made up of  
nothing but Skin and cellular Substance. The Meatus Audi-  
torius is partly bony, and partly cartilaginous; The bony Por-  
tion is the longest, and forms the Bottom of the Canal - The  
cartilaginous Portion is the shortest, and, in Adults, forms the  
external Opening, or Orifice of the Canal.

Thefe two Portions, join’d endwise to each other, form aCanal of about three Quarters of an Inch in Length, of dif-  
ferent Wideness in its different Parts, and a little contorted. It  
is lined on the Inside by the Skin, and cellular Membrane, thro’  
its whole Length; and thus these Integuments make up for the  
Breaks in the cartilaginous Portion, and form a kind of cuta-  
neous Tube in the other Portion. The cellular Membrane is  
confounded with the Perichondrium and Periosteum of th.  
Meatus. , , ,

The Skin which covers both Sides of the Cartilage contains  
a great Number of fmall Glands, which continually discharge  
an oily whitish Humour, conceded chiefly near the Adhesions  
of the Ear to the Head, and under the Fold of the Helix ., and  
these Glands are of the sebaceous Kind. The Skin which lines  
the Meatus Auditorius, contains another kind of Glands, of a  
yellowish Colour, and which may be plainly seen on the convex  
Side of the cutaneous Tube.

These Glands are disposed in such a manner as to leave reti-  
cular Spaces hetween them, and they penetrate a little way into  
the Substance of the Skin. They are call’d *Glandulae Cerumi-  
ni fa,* because they discharge thet Matter which is named *Ceru-  
men,* or the Wax of the Ears. 1 The inner Surface of the cuta-i  
neouSTuhe is full of fine Harrs, between which lie the Orifices  
of the ceruminous Glands. The first Place, in which wh meet  
with these Glands, is on that Part of the. convex Side of the  
cutaneous Tube, which supplles the Breaks of the cartilaginous  
Meatus. *.‘o'*

The Arteries of the *external Ear* come anteriorly from the  
Arteria Temporalis, and posteriorly from the Occipitalis, which  
is a Branch of the external Carotid. It is proper to observe  
here, that the Occipital Artery communicates with the Verte-  
bralis, and thereby with the internal Carotid. The Veins are  
Branches of the Jugularis Externa. And the Occipital Vein  
communicates not only with the Vena Vertebralis, but im-  
mediately with the neighbouring lateral Sinus of the Dura  
Mater. \ . .... : . E . ... .. . si '

The Porno Dura of the Auditory Nerve, having paced out  
of the Cranium, thro\* the Foramen Stylo-mastokheum, in the  
manner that shall he afterwards described, gives off a Branch  
which runs up behind the Ear, to the back Side of which it  
sends several Filaments; and the Trunk of this Branch sends  
likewise Filaments to the Meatus, and sore Side of the *Ear.*The second Vertebral Pair fends also a Branch to the *Ear,* the  
Ramifications of which communicate with those of the other  
Branch from the Portio Dura.

All the bony Organ of Hearing may very naturally he divided  
into sour general Parts . ’

I. The external Meatus Auditorius.

*a.* The Tympanum, or Barrel of the Ext.

3. The Labyrinth.

4. The internal Meatus Auditorius. . ..

It may likewise be divided into immoveable or containing  
Parts, which take in all the sour already mentioned; and  
moveable or contain’d Parts, which are four little Bones lodg’d  
in the Tympanum, cull’d *Incus, Malleus, Stapes, and Os Or- ,  
biculare, xss Lenticulare.*

*The external* **MEATUS AUDIToRIus.**

The external Auditory Passage hegins by the external Audi-  
tory Hole, the Edge of which is rough and prominent; but  
backwards, towards the Mastoide Apophysis, it appears very'  
much Hoped. The Passage itself is about half an Inch .in  
Length, running obliquely from behind forward, in a curve ;  
Direction, and sometimes winding a little in the Middle, like  
a Screw. Its Cavity is almost oval, wider at the Entry then *i*at the Middle, after which it widens again by Degrees.

*It* terminates inwardly by an even circular Edge, lying in.a.  
Plane very much inclined, the upper Part of it being turn’d -  
outward, and the lower Part inward; fo thet the whole Canal  
is longer on the lower Side than on the upper. The concave  
Side of the circular Edge is grooved quite round. . . .

in Children this bony Canal is wanting, as well as the Ma-;  
stoide Apophysis, and the inner circular Edge is a distinct Ring, ,  
which, in an advanced Age, unites entirely, and becomes one .  
Piece with the test: It is termed the *Bony Circle* in Infants;  
**and, indeed, it is very easily separated from ail the other**Parts.

... It should seem therefore, that the whole bony Canal in  
Adults is only a Prolongation of the bony Circle in Children ;  
-because, even in a more advanced Age, the whole Canal may  
without much Difficulty he taken out. The circular Groove  
llies between the Mastoide Apophysis and the articular Fissure or  
Crack.

*The* **FIGURE** *and* **SITUATION** *of the* **TYMPANUM.**

**.. The** *Tympanum* or Barrel of the Ear is a Cavity irregularly,  
semi spherical, the Bottom of it heing turned inward, and the  
MouthJoined to the circular Groove already mentioned. Both  
Eminences and Cavities are observable in it.

**- ..... ... EMINENCES.**

' The remarkable Eminences are three in Number : A large  
Tuberosity lying in the Very Bottom of the Barrel, a little to-  
ward: the back Part ; and a small irregular Pyramid, situated  
about the Tuberosity, and a littie more backward .; the Apex of  
it is perforated by a small Hole, and. on one Side ofthe Basis  
two small bony Filaments are often found in a parallel Situation;  
-and, indeed, I helieVe they are seldom wanting, though their  
tender Structure exposes them to be often broken. In the third  
Eminence is a Cavity shaped like the Mouth of a Spoon, situ-  
ated at the upper, and a littie towards the anterior Part of the  
.Bottom of. the *Tympanum..* This .Cavity is Part of a Half-  
canal, of which hereafter ; and at a very small Distance from  
its Point, is.a little bony Ridge, which goes from one Edge of  
it to the other, but is sometimes not entire.

**CAvI T IBS.**

The principal Cavities in the *Tympanum* are, the Opening  
of the Mastoide Celis or Sinuosities, the Opening of the *Eu- .  
stachian Tube,* the bony Half-canal, the *Fenestra Ovalis,* and  
*Rotunda* ; and to these may he added the. small Hole in the Py-  
ramid. .

The Opening of the Mastoide Celis is at the posterior and  
Upper Part of the Edge of the Barrel. ’ The Cells themselves,  
which end there, are dug in the Substance of the Mastoide Pro-  
Cess, being Very irregular, and full of Windings and Turnings.

The Opening of the *Eustachian Tube* is at the anterior, and  
**a** littie toward the upper Part of the Edge of the Barrel.  
This Tube, in *France* generally ..term'd the *Aqueduct,* runs  
from the Tympanum towards the posterior Openings of the  
Nasal Fossae, and Arch of the Palate. The bony Portion  
thereof, of. which alone I here speak, is. dug in the Apophysis  
Petrosa, along the Duct of the carotid Apophysis; and when it  
leaves that, it is lengthened out by the spinal Apophysis os **the  
OS** Sphenoides. These two Cavities, the Mastoide . Celis, and  
the Eustachian Tube, are, in some measure. Prolongations of  
**the** Tympanum, one anterior, **the** other posterior.

The bony Half-canals, of which the Cavity resembling the  
-Mouth of a Spoon is the Extremity, lies immediately above the  
Eustachian Tube, towards the upper Side of the Apophysis Pe-  
trosa, or rather in the Very Substance of that upper Side, in a  
natural State, a small Muscle is lodged in it.

The *Fenestra Ovalis* is a Hole os Communication between  
the Tympanum and Labyrinth. It lies immediately above the  
Tuherosity, the upper Side of it heing a little rounded, the  
lower a little flatted ; and one Extremity heing turned forward,  
the other backward. Towards the Labyrinth this Opening has  
**a** little flat thin Border quite round it, , which renders it nar-  
rower at that Place than any-where else.

The *Fenestra Rotunda* is something less than the *Ovalis,* and  
situated in the lower, and a littie towards the posterior Part of  
the large Tuberosity ; the Opening of it, which is the Orifice  
**os** a particular Duct in the Labyrinth, lying obliquely backward  
and outward.

. The Hole in the Apex of the Pyramid is the Orifice of a Ca-  
vity, which may he named the Sinus of this Pyramid.

*The* **OSSICULA AUDITUS.**

The *Tympanum* contains several littie Bones, called the  
' Bones of the Ear. They are generally four in Number, deno-  
minated from something to which they are thought to bear a  
Resemblance, as the *Incus, Malleus, Stapes,* and *Os Orbicu-  
lare,* or *Lenticulare. .*

**INCUS.**

. The *incus* or *Anvil* resembles in some measiire one of the an-  
terior Grinding Teeth, with its Roots, at a great Distance

. from each other ; at least it comes nearer to this than to the  
Shape of an Anvil. It may be divided into Body and Branches.  
The Body is a large Substance; the Branches or Legs are two,

. one long and one short. The Body is turned forward, **the**short Leg backward, and the long Leg downward.

The Body of the incus is broader than it is thick. It has  
two Eminences, and two Cavities between them, much in the  
dame manner as we see in the Crown of the first Grinders.

. The short Leg is thick at its Origin, and from thence de-  
creasing gradually, it entis in R Point. It is situated horizon-

sally, its Point being turned hackward, and joined to the Edge  
*Of* the Mastoide Opening ofthe Tympanum.

The long Leg, View'd through the external auditory Passage,  
appears to he situated Vertically ; but if we look upon it either  
on the fore or baek Side, we see it is incimed, the Extremity of  
it being turned much more inward than the Root or Origin.  
The Point of the Extremity is a littie flatted, and hent inward  
like a Hook, and sometimes a little hollowed like a kind of  
Ear-psckehi By this we may distinguish the Incus of one Ear  
from that of the other, when out of their Places ; for, turning  
the short Leg hackward, and the long Leg downward, if **the**Curvature of this long Leg he toward the Left Hand, the Bone  
helongs to the Right Ear ; is towards the Right, it helongs to  
the Left Ear.

**MALLEUS.**

**The** *Malleus* or *Hammer* is a long Bone, with a large Head,  
a small Neck, and two Apophyses, one in the Neck, the other  
in the Handle.

The Top of the Head is considerably rounded, and from  
thence it contracts all the Way to the Neck. Both Head **and**Neck are in an indined Situation ; and the Eminences and Ca-  
vities in it answer to those in the Body of the *Incus.*

The Handle-is look'd upon as one of the Apophyses of the  
*Malleus*; and, in that Case, it is the greatest of the three. **It**forms an Angle with the Neck and Head, near winch it is  
.something broad and flat, and decreases gradually toward its  
.Extremity. -

The Apophysis of the Handle, termed by others the small or  
short Apophysis of the Malleus, terminates the Angle already  
mentioned, being extended towards the Neck, and lying in a  
strait Line with that Side or Border of the Handle winch is  
next it.

The Apophysis of the Neck, called also Apophysis Gracilis,  
is in a natural State Very long, but so flender withal, that it is  
very easily broken, especially when dry, which is the Reason  
why the true Length of it was for a long time unknown. It  
arises from the Neck, and sometimes appears much longer than  
it really is, by the Addition of a small dry'd Tendon sticking to  
it. \* \*

-When-the Malleus is. in. Its true Situation, the Head and  
Neck are turned upwards and inwards; the Handle downwards,  
parallel to the long Leg of the *Incus,* but more forward ; the  
Apophysis of the Handle upwards and outward, near the superior  
Portion of the Edge of the *Tympanum,* near the Centre of which  
is the Extremity of the Handle; and\* the Apophysis Gracilis  
forward, reaching all the Way to the articular Fissure in the Os  
Temporis. It is easy, after what has been said, to distinguish  
the Malleus of the Right Side from that of the Left.

**S TAJ E s.**

The *Stapes* is a finall Bone, Very well denominated from the  
Resemblance it bears to a Stirrup. It is divided into the Head,  
Leg, and Balis.

The Head is placed upon a short flatted Neck, the.Top Of it  
being sometimes flat, sometimes a little hollow.

- The two Legs, taken together, form an Arch like ’that of **a**Stirrup, in the concave Side of which is a Groove, winch nms  
through their whole Length. One Leg is longer, more hent,  
and a littie broader,-than the other. - „

The Basis resembles that of a Stirrup, both in its oval Shape,  
and Union with the Legs, except thet it is not perforated as the  
Stirrups now are, but solid, like those os the Antients. Round  
« its Circumference, next the Legs, is a littie Border winch  
makes that Side of the Basis appear a littie hollow. The other  
Side is pretty smooth; -and one half of the Circumference is  
something more curve than the other.

The Subject being in an exact Posture, the *Stapes* is to be  
considered as lying on its Side, with the Head turned outward,  
near the Extremity of the Leg of the *Incus* ; the Basis, inward,  
heing fixed in the *Fenestra Ovalii ,* the longest Leg, backward ;  
the shortest, forward ; and both in the same Plane. By this  
Situation it is easy to know the Stapes belonging to each ear. -

**OS ORBICULARE.**

The orbicular or lenticular Bone is the smallest Bone in the  
Body. It lies between the Head of the Stapes and Extremity  
of the long Leg of the *Incus,* being articulated with each of  
these. In dry Bones it is found Very closely connected, some-  
times to the *Stapes,* sometimes to the *Incus y* and might in that  
State he easily mistaken for an Epiphysis of either of these  
Bones.

**.LABYRINTH;**

The *Labyrinth* is divided into three Parts, the anterior, mid-  
die, and posterior. The middle Portion is termed *Vestibulum,*the anterior *Cochlea,* and the posterior the *Labyrinth,* in parti-  
cular, which comprehend the three semicircular Canals.

in the true Situation and Direction of the *Apophysis Petros.a,*the *Cochlea* lies forward and inward, towards the Extremity of

The Apophysis ; the semicircular Canal backward and outward,  
toward she Basis of the Apophysis, and the Vestibulum between  
**the** other two.\*

**VESTIBULUM.**

The *Vestibulum* is an irregularly round Cavity, less than the  
*Tympanum,* and situated more inward, and a little more for-  
ward. These two Cavities are, in a manner, set Back to Back,  
with a Common Partition-wall between them, perforated near  
the Middle by the *Fenestra Qualis,* by winch the Cavities com-  
municate with ope another.

The Cavity os the *Vestibulum* is likewise perforated by several  
**other** Holes; on the Outside, or towards the *Tympanum,* by  
the *Fenestra Rotunda,* but this is commonly seen in dry Bones  
Only ; on the back Side; by the five Orifices of the semicircular  
Canals; on the lower Part of the fore Side, by two Holes which  
are the Entry of the *Cochlea,* but One of them is shut up in fresh  
Bones; and on the fore Side, towards the internal *Meatus An-  
ditorius,* opposite to the *Fenestra Ovalis,* by a great many Very  
small Holes for the Passage of the Nerves, On the upper Side  
there are only small Pores.

**SEMICIRCULAR CANALS.**

The semicircular Canals are three in Number, one vertical  
find superior, one Vertical and posterior, and one horizontal.  
The superior Vertical Canal is situated tranfirersty with respect to  
the Apophysis Petrosa, the convex Side or Curvature of it being  
turned upward, and the Extremities downward; one inward,  
the other outward. The posterior vertical Canal lies parallel to  
the Length os the Apophysis, the Curvature heing turned hack-  
ward, and the Extremities forward, one upward, the other  
downward; and the superior Extremity of this Canal meets and  
Ioses itself in the internal Extremity of the former. The Curva-  
ture and Extremities of the horizontal Canal are almost on a  
Level, the Curvature lying obliquely hackward, and the Extre-  
mities forward, ending under those of the superior Vertical Ca-  
rial, but a littie nearer each other; and the inner being almost  
in the middle Space, hetween the Extremities *of* the posterior  
vertical Canal.

The horizontal Canal is generally the least of the three; **the**posterior Vertical is often, and the superior Vertical sometimes,  
the greatest; and sometimes these two are equal. All the  
three Canals are larger than a Semicircle, forming nearly three  
Quadrants ; they are broader at the Orifices, than in the Mid-  
dle. These Orifices open into the hack Side of the *Vestibulum,*as has been said, heing but five in Number, because two of  
Them are lost in each other. So that in the posterior Part of  
the *Vestibulum,* two appear towards the. Inside, and three to-  
wards the Outside. ' /

In Children the Substance Of thefe Canals is compact, while  
that which surrounds them is spongy, so that they may be easily  
separated from the rest Of the Apophysis Petrosa. In Adults,  
all the Parts of the Bone are so solid, that these Canals appear  
only like Passages dug in a Piece of Ivory. From this De-  
fcription it is assy to distinguish the Right *Labyrinth* from the  
Left. ' '

**COCHLEA.**

The *Cochlea* is a sort of spiral Shell, with two Ducts, form'd  
in the anterior Part of the Apophysis Petrosa, in some measure  
resembling the Shell of a Snail. The Parts to he distinguished  
in it, in its true Situation, are the Basis, the Apex, the spiral  
Lamina, Or Half-septum, by which its Cavity is divided into  
two Half-canals, the Spindle round winch the *Cochlea* turns,  
find lastly the Orifices and Union of the two Ducts.

. The Basis is turned directly inward, toward the internal Fo-  
ramen Auditorium ; the Apex; outward ; and the Axis of the  
Spindle is nearly horizontal; but in all of them Allowance must  
he made for the Obliquity of the OS Petrosum, in which they  
lie. . .

The Basis of the *Cochlea* is gently hollow'd ; and towards the  
Middle, perforated by several small Holes. The Spindle is a  
kind of short Cone, with a Very large Basis, which is the Mid-  
dle of the Basis of the *Cochlea.* Through its whole Length  
runs a double spiral Groove, which, through'a Microscope,  
shows a great Number of Pores.

The *Cochlea* makes about two Turns and art half from the  
Basis to the Apex ; and the two Ducts, being strictly united to-  
gether through their whole Course, form an entire common  
Septum, which must not be confounded with the Half-septum  
or spiral Lamina, aS is often done. The first might he Termed  
the common Septum j **the** other, the particular Septum, or  
Dais-septum. - -

Both Of them are closely joined to the Spindle, heing thicker  
There than in.any other Place. The common Septum is com-  
plete, and separates the Turns entirely from each other; where-  
as the Half-septum in the Sceleton is only a spiral Lamina, the  
Breadth of which is terminated all round by a very thin Border  
**lying in** the middle Cavity of the *Cochlea.* In the natural Slate

there is a membranous Half-septum, which Completes the Par-  
tition between the two Ducts. .\*.

The two Half-canais turn jointly about the Spindle, one **be-**ing situated towards the Basis of the *Cochlea,* the other towards  
the Apex ; for which Reason I have always termed one of them  
internal, the other external; the Division of them into the up-  
per and lower Flight not being agreeable to the natural State,  
but liable to convey a Very salse Idea thereof.

-\* The Spiral or volute of the *Cochlea* hegins at the sower  
Part of the *Vistilndum,* runs from thence forward to the Top,  
then backward down to the Bottom, afterwards upward and  
forward, and so on from the Basis, which is. turned inwards, to  
the Apex, which is turned outwards. .

From this Description it is easy to know to which Ear any  
*Cochlea* belongs, when we see it prepared^ It likewise teaches  
us, that in the Right *Cochlea* the Direction of the Turning is  
the same as in Garden-snails, and aimost all the other common  
Shells ; but in the Left *Cochlea* the Turnings are in a .con-  
trary Direction, as in one Kind of Shell,, which is rarely met  
with. ‘ i .ἐν

The two Half-canals communicate fully at the Apex os the  
*Cochlea.* Thein separate Openings are towards the Basis, one  
Of them heing immediately into the lower Part of the sore Side  
Of the *Vestibulum,* the other into the *Fcriestra.Pjotunda.* These  
two Openings are separated by a. particular Turning, which  
shall be explained. - \*. ’ s \ ...

**FORAMEN AUDITORIUM INTERNUM. ’**

The internal auditory Hole is the Backside os the Apophysis  
Petrosa, in some measure hehind the *FestibulUm* and Basis os the  
*Cochlea. It* is a kind of blind Hole, divided into two Fossilise,  
one large, the other small. The large one lies lowest, and  
serves *for* the Portio Mollis of the auditory Nerve, or seventh  
Pain. The small one is uppermost, and is the Opening of a  
small Duct, through which the Portio Dura of the same Nerve  
passes. ‘ .

The inferior Fosthla is full of little Holes, which,. in the na-  
rural State, are filled with nervous Filaments of the Portio  
Mollis, which *go to* the Spindle, to the semicircular Canals,  
and to those of the *Cochlea.* It is this Fosthla which sorms the  
shallow Cavity at the Basis of the Spindle os the *Cochlea: .*

The Passage for the Portio Dura of the auditory Nerve runs  
hehind the *Tympanum y* and its Orifice is the Stylornastoide  
Hole. *Fallopius* gave to this Duct the Name of *Aqueduct,*from its Resemblance to some Aqueducts in *Italy.* It begins  
by the small Fosthla, and pierces from within, outwards, the  
upper Part Of the Apophysis Petrosa, making there an Angle or  
Curvature. From thence it is inclined backward, behind **the**small Pyramid of the *Tympanum,* and runs down to the Stylo1,  
mastoide Hole, through which *it* goes out. It communicates  
likewise by a small Hole with the Barrel of the Eat.

in some Sculls this Aqueduct of *Fallopius* is open on the tip-  
per Part of the Apophysis Petrosa, a kind of Break appearing  
in it, formed by a double Hole. It is at this Place that in  
makes the Angle already mentioned. But commonly it is co-  
vered with a bony Lamina.

The other Parts of the Ear are principally the Membrana  
Tympani, the Periosteum os the Barrel, the Membrana  
Mastoidaea Interns, the Muscles of. the Ossicula; the Parts  
which complete the Formation of the Eustachian Tube, the  
Arteries, Veins, and Nerves. I find myself, however, under  
a Necessity of beginning by the Tuba Eustachiana, for two  
Reasons: First, because the bony Parts of that Tube are but  
of Very small Use *for* the Knowledge of its whole Structure and  
-Composition. And, secondly, because we are obliged to men-  
tion it in describing the Muscles.

The *Eustachian Tube,* otherwise called *Ductus Auris Pala-  
tinus,* and in *France* generally the *Aqueduct :* This, however,  
must not the confounded with the Aquaeductus Fallopii. It is a  
Canal or Duct which goes from the *Tympanum* to the posterior  
Openings of the Nares, or Nasal Fossae, and toward the Arch  
Of the Palate; it is dug in tho Apophysis Petrosa, along the ca-  
rotid Canal ; and it is lengthened out by the spinal Apophysis of  
the OS Sphenoidale. *"' r*

In its natural State, this Duct reaches from the Cavity of the  
Barrel to the Root or superior Part of the internal Ala of the  
Apophysis PterygoideS; and through this whole Course it is  
made up of: two Portions, one intirely bony, and the other  
partly bony, partiy cartilaginous, and partly membranous.

The bony Portion lies through its whele Length immediately  
above the Fissure of the Glenoide, or articular Cavity of the Os  
Temporis, and terminates at the Meeting of the spinal Apo-  
physis of the Os Sphenoidale with the Apophysis Petrosa of the  
OS Temporis, that is, between that spinal Apophysis and **the**. inferior Orifice os the carotid Canal.

The other or mixed Portion reaches in the same Direction  
"from this Place to the internal Ala of the Apophysis PterygoideS,  
or to the posterior and outer Edge os the Nares. But, to sorm.a  
more exact Idea of it, it will he proper to consider jt as divided  
into four Parts, twosuperior, and two inferior.

**The** two upper Parts Or Quarters are bony; and of these  
**the** innermost is formed by the Side of. the Apophysis Petrosa,  
the Outermost by the Side of the Apophysis Spinalis of the Os  
Sphenoides, so that the upper Half of this Portion of the Tuhe  
is bony. Of the two inferior Parts, the internal is cartilagi-  
nous, and the external membranous; so that the lower Hals of  
this Portion of the Tuhe is partly cartilaginous next the Os  
Sphenoidale, and partly membranous next the Apophysis Pe- -  
trosa.

The Eustachian Tube, thus formed, is very narrow in the  
bony. Part next, the *Ear*; the .other Portion grows .gradually  
wider, especially near the posterior Nares, where the inner car-  
tilaginous Side .terminates by a prominent Edge, and the outer  
Side joins that of the neighbouring Nostril. The Cavity of the  
rTuhe is fined by a Membrane like that of the internal Nares,  
of which it appears to be a Continuation ; and, on the promi-  
nent Edge, this. Membrane is considerably increased in Thick-  
ness, representing a kind of haff Pad. .

The Situation of the two Tubes is oblique, their posterior  
Extremities at the *Ears*. being at. a greater Distance than the  
anterior at the Nares, and the convex Sides of the prominent  
Edges are turned .toward each other.. The Openings of the  
Tubes are oval at this Place, as is likewise their whole Cavity,  
especially that of the mixed Portion.

The Eustachian Tuhe is furnished with three Muscles, ac-  
cording to *Valsalva,* who discovered, that the *Pterygostaphyli-  
rues,* and the *Bphenopterygopalatinus,* do not properly belong  
Io the Uvula,, but to this Tuhe. To these he adds a. third,  
winch is the *Palatofalpingaus,* fince called by some Authors,  
*Musculus Tuba Navus Falfalva.* It arises broad and tendinous  
from the .Edge Of all the lunated Part of she Os Palati, several  
Of its Fibres being spread upon the Membrane that covers the  
.Foramen Narium; then growing into a small thin Tendon, it  
is reflected about the Hook-like Process of the inner Ala *of* the  
processus Pterygoides.; but.foon turning into a narrow andthin  
fleshy Belly, it runs close along the Inside of the Musculus Pte-  
rygoidaeus Internus, .and is inserted carnous into all the mem-  
branous, .fleshy,, and cartilaginous Part of the Tuhe.

Its Use is to dilate and keep open this Chanel, as *Valfabvia*first has most ingeniously taken Notice.

The *Membrana Tympani* is a thin transparent stattish Pellicle,  
the Edge of which .is round, and strongly fixed in the orbicular  
\* Groove, which divides the bony Meatus of the external *Ear*from the *Tympanum,* or Barrel. This Membrane is Very much  
stretched. Or Very, tense, and yet .not perfectly flat ; for, on the  
Side next the Meatus Externus, it has a small Hollowness  
which is pointed in the Middle; and, on the Side next the *Tym-  
panum,* it. is gently convex, and also pointed -in the Middle.

This Membrane is situated obliquely, the upper Part of its  
.Circumference heing turned outward, and the lower Part in-  
ward, fuitable .to the Direction of the bony Groove already  
unentioned. .It is. made up of several Very fine Laminae, closely  
.united together. The external Lamina is, in some measure, a  
-production of the Skin and Cuticula of the external Meatus ;  
sor they may he-pulled at the. same time like the Finger of a  
Glove. The internal Lamina is a Continuation of the Peri-  
osteum *osffieT.ympanum* ; and, when the Membrane has been  
first macerated in Water, each of these Laminae may be subdi-  
vided into several others, winch I- have sometimes made to  
amount in all to six. In Very young Children, this Membrane  
ds covered on the Outside by a thick mucilaginous Web.

The Depression in the Middle of the *Membrana Tympani*as caused by the Adhesion of the little Bone called *Malleus,* the  
Handle of which is closely joined to the Inside of the Mem-  
brane, from the upper Part of the Circumference all the Way  
'.to the Centre, -to which the End of the Handle is fixed. This  
Handle seems to lie in a Very fine membranous Duplicature,  
thy means of which it is tied to *ffiz Membrana Tympani,* and  
which serves it for a Periosteum.

.The Periosteum of the *Tympanum,* or Barrel of the *Ear,*produces that of the small Bones, and it may be made visible  
by means of Anatomical Injections, winch discover capillary  
Vesseis Very distinctly ramified on the Surface of the *Ojsicula.*It is likewise continued over the two *Fenestra,* and enters the  
*Eustachian Tube,* where it is lost in the inner Membrane of  
that Duct. ' -

The Cellulae Mastoid aese are Very irregular Cavities in the Suhe  
tstance of the Mastoide Apophysis, which communicate with  
each Other, and have a common Opening towards the Inside,  
.and a little above the posterior Edge of the orbicular Groove.  
These-Cells are lined by a fine Membrane, which is partly a  
Continuation os the Periosteum of the *Tympanum,* and partiy  
.seems to he os a glandular Structure, like a kind of Membrana  
.Pituitaria. The Mastoide Opening is opposite to the small  
.Opening os the *Eustachian Tube,* but a little higher.

The Ligaments of the Ossicula come next in Order ; the  
*Incus* is tied by a strong short Ligament fixed in the Point of  
the short Leg to the Edge of rhe Mastoide Opening. Be-  
-.tween the *Incus* and *Malleus* wo find a small thin Cartilage.  
The *Malleus* -is Connected through the whole Length of its

Handle, to the Inside Of the *Membrana Tympani,* in the man-  
ner already said. I need only add here; that, by Help of a Mi-  
croscope, we discover round the Point of the Handle, in the  
Substance of the Membrane, a small orbicular Plane, of **a**whitish Colour, a littie inclined to red. b

The *Malleus* has three Muscles, one external, one anterior,  
and one internal ; and the *Stapes* has one Muscle. The exter-  
nal or superior Muscle of the *Malleus,* attributed to *Casserius,*and mentioned by *Fabrioius abAquapendente,* is a thin Bascicua  
lus of fleshy Fibres, lying along the upper Part of the bony  
*Meatus Auditorius,* between the Periosteum and the other Inte-  
guments. The outer Part of it is pretty broad, and it contracts  
by Degrees as it advances towards the upper Part or Break of  
the orbicular Groove of the *.Tympanum,* into which it enters by  
a small Tendon, above the *Membrana Tympani,* and is inserted  
in the Neck of the *Malleus,* near the small Eminence, or  
short Apophysis, of the Handle. This Muscle is sometimes so  
pale ashardly to be distinguished.

The anterior Muscle of the *Malleus,* called by Mr. *Duver-  
ney* the *External,* is fleshy, long, and thin. It runs along the  
Outside of the *Eustachian Tube,* to winch it adheres Very close-  
ly through its whole Length. Its anterior Extremity is fixed in  
that Side of the Tube just hesore the Sphenoidal Spine ; and 'the  
posterior Extremity ends in a long thin Tendon, which runs in  
the Articular or Glenoide Fissure of the OS Temporis, thro’ **a**small oblique Notch, at which Fissure it enters the *Tympanum,*and is inserted in the long thin Apophysis of the *Malleus:* II.  
is partly accompanied by a Nerve, which forms what is called  
the *Chorda Tympani. -*

The internal Muscle of the *Malleus* is very fleshy and  
distincti- It lies along the Inside of the *-Eustachian Tube,* partly  
on the cartilaginous, and partly on the bony Portion, heing  
fixed hy one Extremity in the Apophysis Petrosa. Afterwards  
it runs along the Cavity of the bony Half-canal of the *Tympa-  
num,* within which Cavity it is invested by a Portion ofa mem-  
branous or ligamentary Vagina, winch, being fixed to the Edges  
of the Half-canal, forms an entire Tube therewith ; and this  
Vagina must he cut open hesore we can see the Muscle.

At the Extremities of this bony Half-canal, where we ob-  
serve the Cavity shaped like the Mouth os a Spoon, -this Mui-  
cle ends in a Tendon, -which is hent round the transverse bony  
or ligamentary Ridge in the last-named Cavity, as over a Pulley,  
and is inserted in the Neck of the *Malleus,* above the small  
Apophysis, advancing likewise as far as the Handle. The Ex- .  
tremities of the anterior and internal Muscles sometimes meet, .  
and there they cover the mixed Portion of the *Eustachian  
Tube.* \_ - i

The Muscle of the Ptapes is short and thick, and lies con-  
cealed within the small bony Pyramid at the Bottom of the  
*Tympanum.* The Cavity which it fills, touches very nearly the  
bony Canal ofche Portio Dura of the Auditory Nerve;-and  
it terminates in a small Tendon, which goes out of the-Cavity  
through the small Hole in the Apex os the Pyramid. As it  
goes through the Hole, it turns forward, and is inserted in the  
Neck os the *Stapes,* on the Side of the longest and most crook-  
ed Leg os that Bone.

The-three Parts of -the *Labyrinth,* that is, the *Vestibulum,  
semicircular Canals,* and *Cochlea,* are fined by a fine Perioste-  
um, which is continued over all the Sides of their Cavities,'  
and shuts the two *Fenestra* of the *Tympanum.*

In all the Subjects which I ever examined, I have found the  
semicircular Canals simply fined by a Periosteum adhering to  
their inner Surfaces, without any particular membranous Bands.  
The two Half-canals os the *Cochlea* are lined in this manner:  
The Periosteum of the two Sides of the bony Spiral Lamina  
advances beyond the Edge of that Lamina, and forms a mem-'  
branous Duplicature, which extending to the opposite Side,  
Completes the Spiral Septum.

This Septum separates the two Half-canals from the Basis to  
the Apex, but there it leaves a small Opening, hy which the  
small Extremities of the Half-canals communicate with each  
other. The large Extremity of the external Half-canal ends  
by an oblique Turn, in the *Fenestra Ratunda,* which is shut by  
a Continuation of the Periosteum of that Canal. .The large  
Extremity of the other Half-canal opens into the *Vestibulum ,*and these two Extremities are entirely separated bya Continu-  
ation of the Periosteum..

All the Periosteum of the internal *Ear,* especially that of  
the *Ojsicula* and *Tympanum,* is in Children no more than a Mu-  
cilage; and in them likewise the *Membrana Tympani* is thick,  
opake, and covered with a whitish siimy Matter.

Tbrough the whole Extentos the Periosteum of the *Internal  
Ear,* especially on that os the *Ossicula,* semicircular Canals,  
and Half-canals of the *Cochlea,* we discover a vast Numher of  
Blood-veffeis, not only by Anatomical Injections, but in In-  
flammations, and even without the Help of-a Microscope; for  
**I** have often shewn them to the naknd Lye in the semicircular  
Canals, and Half-canals Of the *Cochlen.* The Arteries come  
partly from the internal Carotid, and partly from the Arteria  
’Basilaris, which is a Continuation of the Vertebralis, the small

Capillary Ramifications of which may be- observed to aecorn-  
pany the Auditory Nerve, through the internal Foramen Audi-  
torium.

The Portio Mollis of the Auditory Nerve ends by its Trunk  
at the great Foffula os the Internal Auditory Hole, from whence  
the Filaments pass through several small Holes in the Basis of  
the *Cochlea,* partly to the Periosteum of the semicircular Ca-  
nals, and partly to the internal Periosteum of the Half-canals  
of the *Cochlea.*

The Portio Dura, which I name *Nervus Sympatheticus Mi-  
nor,* runs first of all into the small Foffula os the Foramen  
Auditorium Internum; then passes through the whole bony Duct,  
called *Aquaductus Fallopii,* and comes out again, through the  
Stylomastoide Hose os the Os Temporis. In this Course it  
communicates with the Dura Mater on the upper or anterior  
Side of the Apophysis Petrosa, at the Place where the bony  
Duct is interrupted. ... . .

Having reached behind the small Pyramid in the Bottom of  
the *Tympanum,* this Nerve sends a small Filament to the Mus-  
cle of *feae Stapes* ; and, a little before it goes out by the Stylo-  
mastoide Hole, it gives off another more considerable Filament,  
.which enters the *Tympanum* from behind forward, pastes he-  
tween the long Leg of the *Incus,* and Handle of the *Malleus\**and afterwards runs cross the whole Breadth os the *Tympanum  
p.* little obliquely, and goes out at tho same Place at which theTendon of the anterior Muscle of the *Malleus* enters.

This small Nerve is generally called *Chorda Tympani,* because,  
in its Passage through the *Tympanum,* it has been compared to **the**Cord os a Drum. Having lest the Cavity of the *Internal Ear,*it advances toward one Side of the Basis os the Tongue, where  
-having joined the small Nervus Lingualis, it is considered aS a  
-kind os Recurrent.

. The *Portio Dura* passes through the small Fosthla in the in-  
ternal Auditory Hole into the winding Duct of the Apophy-  
sis Petrosa, and goes out by tho Foramen Stylomastoideum,  
to the Face and other neighbouring Parts. As sopaffeS through  
the winding Duct, or Aqueduct of *Fallopius,* it touches the  
Dura Mater at the small Opening on the upper Side of **the**Apophysis Petrosa, where it joins some Filaments from the  
.fifth Pair.

. It likewise gives off a Filament to the Muscle of the *Stapes,*and, as it goes out, it gives or receives another Filament, which  
passes by the *Tympanum,* and joins the Lingual Branch of the  
inferior Maxillary Nerve.

I chuse to call this Portion of the Auditory Nerve, *Nervus  
Sympatheticus Minor* ; to the Description os which I now pro-  
ceed. j

. The Trunk of each Nerve of the *Portio Dura, or of* the  
*stympathetici Minorio,* having passed through the Ductus **Pe-**trosas Fallopii, and having communicated with the Dura Mater,  
as has been already said, sends off, at about the Sixth-part of  
an Inch from where it goes out at the Stylomastoide Hole,  
two Branches, one upward, the other downward.

The superior Branch runs up chiefly to the posterior Parts of  
.the *External Ear,* to which it is distributed, commnicating as  
it passes hehind the *Ear,* with a Branch of the Second Pair of  
she Cervical Nerves; and forward with a Branch of the Ma-  
.xillaris Inferior.

The inferior Branch is spent on the three Musculi Styloidaei,  
Digastricus, and on the superior Extremity of the Sternomas-  
: toidaeuS, reaching in some Subjects as sar as the Middle of that  
Muscle. Instead of these two single Branches, small Ramin-  
.cations go out sometimes from the Trunk.

Afterwards the Trunk of the *Portio Dura* advancing for-  
ward, through the Parotid Gland, to winch it gives several  
-Filaments ; some of these Filaments running from without in-  
wards, and surrounding that Branch os the external Carotid  
Artery, which runs hehind the *Ear* ; sometimes, though Very  
seldom, the Trunk itself is split to give Passage to the Artery.

This Trunk, having passed through the Parotid Gland, he-  
hind the Angle of the lower Jaw, is divided into two large  
Branches, one superior, the other inferior.

The superior Branch of the Portio Dura is the most consi-  
derable of the two; and, having run upwards for about the  
.Third-part os an Inch, it divides into seven or eight Branches.  
. These Branches are spread superficially, and in an irregular  
radiated manner, on all the lateral Parts of the Face, from the  
Hain aS low as the under Lip, between the Ear and Nose,  
.distributing a prodigious Number of cutaneous Nerves.

in some Subjects thefe Branches, at their first Separation,  
form a kind os *Plexus,* which resembles a Goose's Foot.

The first, second, and third Branches, are distributed to the  
anterior Parts os the *Ear,* on the lateral Parts of the Head,  
the Temporal and Frontal Muscles, and the neighbouring  
.Parts.

. One of these Branches, and sometimes the large superior  
Branch, detaches inward behind the Condyle os the lower *Jaw,  
and before* the Temporal Vein, two or three Filaments, which  
Communicate with the inferior Maxillary Nerve.

**The fourth Branch goes to the Foramen superciliare, or**

Snpra-othitarium, giving in its Passage feveral Filaments to **the**external lateral and superior Parts of the Musculus Orbicularis  
Palpebrarum, and afterwards communicating with the Orbi-  
laryNerve, which goes out by the same Foramen.

The fifth Branch is distributed by small Filaments on the la-  
teral Part of the Cheek; and is partiy lust in some small Holes  
at the Basis or Root of the *sLygorna,* giving likewise some Fila-  
ments to the external lower Part of the *Muscidus Orbicularis  
Palpebrarum.*

The .sixth arid seventh Branches, and likewise the eighth,  
when it is found, are spread on the whele Cheek as far as the  
Nose. Ἀ .. . .

One of these latter Branches pastes under or hehind the *Mee.,  
fculus Zygomaticus,* to winch it gives Filaments ; and then per-  
. sorating and giving Filaments tssthe middle lower Part of **the**Musculus Orbicularis Palpebrarum, it goes to the inferior Ora.  
binary Hole in the Os Maxillare, and communicates with the  
*Nervus Maxillaris Superior.*

The last Branch communicates by some Filaments, with a  
neighbouring Branch Of the large inferior Ramification of the  
Portio Dura.

This large inferior Branch, which is something less than the  
superior, runs under the Angle of the lower Jaw, and is distri-  
buted by several Branches to all the inferior lateral Parts of **the**Face, and to the neighbouring Parts of the Throat, .where it  
..chiefly terminates by a Vast Number of cutaneous FilanaentS. ~.

The upper Branches of the large, inferior Branch run upon  
the *Musculus Maffetcr* to the lower Part of the *Zygomaticus,  
Buccinator,* and other Muscles of tire Lips.

One of these superior Branches communicates with one of  
ι the inferior Ramifications of the upper Branch, and by the In-  
tervention thereof it communicates likewise, in some measure,  
with the Suborbitary Branch of the Nervus Maxillaris Supe-  
rior, or that which goes out by the Foramen Suborbitarium.

The most considerable of all these Branches runs forward  
along the Basis of the lower Jaw, sending Filaments to the  
Musculus Cutaneus, and to the Muscles of the under Lip,  
which it perforates near the Skin, and there communicares with  
the *Nervus Maxillaris Infcrior.*

The inferior Branches run under the lower Jaw, giving Fi-  
laments to the *Glandula Submaxillaris,* and are distributed to  
the Throat on the *Musculus Cutaneus,* intersecting the external  
Jugular Vein. One or more Of these Branches are observed  
Io run down to the Middle of the *Musculus Sternomastardaus,*where it communicates with a Branch of the second Vertebral  
Pain.

. As *Winjkw* has not given the Uses of the different Parts of  
the *Ear* already described, I shall supply this Defect from *Du  
Vcrney.*

We may justly consider the external *Ear* aS a kind of natu-  
ral Hom, the clean and smooth Cavity of which serves to col-  
lect Sounds, and consequently render their impressions on the  
Other Organs of Hearing stronger. This Opinion is confirmed  
by Experience ; for those who haye the Misfortune to heve their  
*Ears* cut off, labour under so great a Difficulty of Hearing,  
that they are obliged to use Horns, or their Hands formed into a  
kind ofTuhe, in order to supply this Defect. For the same  
Reason also, some Animals, such as Deer and Hares, for the  
sake of hearing more distinctly, direct their *Ears* to that Quar-  
ter, from which any Noise they hear, comes.

Some are of Opinion, that the direct Lines of *Sound,* whilst  
insinuating themselves into the Sinuses of the *Ear,* are there  
several times reflected hefore they reach the *Concha*; and that  
these Sinuses, and repeated Reflexions, serve to augment the  
impression made upon the other Organs of Hearing, just as in  
a semicircular Vaals, the Phonic Rays, reflected at equal Angles,  
according to the Circumference of the Angle of the Vault, at  
last pass from one Extremity to the other, by a great Number  
both of strong and faint Reflexinns.

The Motion of the Muscles os the external *Ear,* is a Mat-  
ter attended with a good deal os Obscurity ; but yet it seems  
probable, that the *Concha,* must, by their Action, he either  
contracted or dilated, according m the Impetus or Faintness  
of the tremulous Motions of the Air/

The Meatus of the *Ear,* by redoubling the Reflexions,  
renders the Vibrations more briik and lively; and the Obliquity  
. of its Structure not only guards the *Membrana Tympani* against  
the injuries of the Air, but is also the Reason why the Surface  
of the *Meatus* itself is larger than it would otherwise he; by  
which means a greater Number os Reflexions are made in it,  
a Circumstance winch evidentiy tends to render the subsequent  
Impression proportionably stronger.

That Species of Wax, or Viscid Substance, lodged in **the an-**terior and cartilaginous Part of the *Meatus,* by the *Greeks*called ῥήποι ἐν τὑἰς ῶσι, by the antient *Latin* Physicians, *Auri-  
um Sordes,* and now commonly *Cerumen,* .retains, and, aS it  
were, inViseates, any extraneous Substances or insects, which  
might possibly convey themselves into the Far, and infallibly  
injure the *Membrana Tympani.* But though this Wax answers  
Very noble and excellent Purposes, 'tis nevertheless, on some

Occasions, productive of very considerable Inconveniences;  
dor, unless the Ear was frequently deansed, this viscid Sub-  
stance would be ’accumulated in too large a Quantity, become  
-inspissated thy its long Continuance in the Ear, and at last hin-  
der the tremulous Motions of the Air from reaching the *Mem-  
-brana Tympani.* Some time agO, when I made an Attempt to  
discover the Cause of a Deafness, under which a certain Man  
had laboured for forne Years before his Death, much about  
two Lines from the *Membrana Tympani,* I sound a soft thick  
Pellicule, to rhe exterior Side of which a large Quantity of  
indurated Sordes adhered; and I don’t, in the least, doubt, but  
this Species of Deafnest occurs very often.

The cartilaginous Meatus, which is winding and vanoufly  
interrupted in several Places, forms a certain Ridge, resem-  
- bling a small Tongue, before the *Concha,* just at the Extremity  
of the Cheek, and at the very Entrance of the Meatus. '.This  
Ridge hinders the Reflexions, made within the *Concha,* from  
flipping out of its Cavity, and propels them more directly to  
the more remote and .internal Parts of the *Meatus.* ’Tis also  
probable, that this Ridge serves to close up and stop the Ear on  
which we lie, and consequently-binder the Impression of the  
Air on its Parts; so that it may be said to perform the fame  
Office to the Ear, which the Eyelids, when shut, do to the  
Eyes: . - ι

There are three nervous Branches arising from three different  
Pairs of Nerves, distributed upon the cartilaginous *Meatus,*and these Branches render that Parr of fo sine and exquisite A  
Sensation, that we instantly become sensible of the fmall and  
most minute extraneous Body-, insinuating itself into the Cavity  
of the Ear. ν : - ;

- I now come to consider the *internal Ear,* the first Part of  
which, that occurs, is the *Membrana Tympani* ; and tho’ we can-  
riot affirm,, that-this Membrane is absolutely and indispensably  
necessary to Hearing, since deaf Persons, upon taking theHandle  
Of any musical instrument into their Mouths, are by that  
means, without the Assistance of this Membrane, enabled to  
hear the musical Sounds ; yet ’tis nevertheless certain, that the  
*Membrana Tympani,* is of such Importance to Hearing, that, if  
any Animal has the Misfortune to have it perforated or torn;  
the Hearing of that Animal cannot be long preserv’d, but  
hecorncs gradually weaker and weaker, till ’tis at last quite lost  
and destroy’d.

- This Membrane is both render’d tense and relax’d, by means  
of those small and minute Mofcles affix’d to the *Malleus,* which:is situated immediately hehind this Membrane. The external  
Muscle; by restoring it to the State and Condition of a *peofect  
Plane,* relaxes it; but the internal Muscle, situated on the  
Surface of the *Os Petrosam,* draws it inwards, and by that  
means renders it more tense than it was in its natural State.  
But this is perform’d in fuch a manner, that in the Tension of  
the *Membrana Tympani* both Mufcles ait at one and the same  
time;. whereas its Relaxation is produced by the Action of the  
external Muscle- alone. The Reafon of this Phenomenon is  
plainly this: As the Insertion of the external Muscle is near  
the Head of the *Malleus,* and the insertion of the other some-  
whet farther off, towards the Extremity of the *Manubrium,* the  
Effect produced by the Action of the internal Mufcle. is aug-  
mented by the Action of the external; for, by this means, these  
two Actions push inwards the Extremity of the *Manubrium* of  
*the Malleus,* to which the Tension of the *Membrana Tympani*ought principally to be ascribed.

. ’Tis therefore certain, that these small Muscles act nor is  
. it lefs evident, -that the *Membrana Tympani* is render’d tense by  
the one, and relax’d by the other, in the manner already men-  
tion’d : But "tis no easy Task to know, on whet particular Oc-  
casions they aft, or what determines .them to put that Mem-  
brane into the various States and Conditions necessary for.  
receiving the vast Variety of Impressions made by disterent  
Noises and Sounds.

If we affirm, *teat she Woll* determines and influences them  
to Action, this is not at all probable, since Nosses, for the  
most part, strike out Ears before we arc aware. I should.  
therefore, be inclined to think, that the Objects themfelves,  
according to their respective Natures, determine these Mufcles  
to render this Membrane tenfe, or relax it, as Exigencies re-,  
quire. ' ' . - ‘ .

’Tis absolutely necessary, that the *Membrana Tympani* should,  
on different Occasions, be differently disposed, that thus it may  
he qualified for receiving the different tremulous Motions of the  
Air; and, indeed, ’tis impossible it should transmit these, such.  
«s they really are in themselves, unless it was in some measure  
adapted to their Natures, and accommodated itself, if! may  
so speak, to the Impressions made on different .Occasions, by  
assuming Degrees of Tension, fit for representiog the various  
Tones of fonorous Bodies. If,. when two Lutes are laid upon  
a Table, you strike a Suing in one with your Fingers, in order  
to move the corresponding String in the other, everyone knows,,  
that, heforc you can produce this Effects the corresponding  
Suing must he tuned to the fame Key ; or, as Musicians exprefs  
it. must he in Unison with the Strirw first shuck, whether its

Note he ah OAave, a double Octsve, a fifth, a fourth, or any  
other Noto whatever, otherwise the Vibrations of the String  
which is struck, will prnduce but flight, and scarce perceptible,  
tremulous Motions in the corresponding String of the other  
Lute.

- Since, then, the Diversity of Noises and Sounds depends upon  
the different Natures and Collisions of sonorous Bodiessince,  
for Instance, an acute Tone proceeds from a Body, whose Parts  
are so disposed as to render them fit for producing ouly the  
most instantaneous Vibrations, which they forthwith convey io  
the ambient Air; since, on the contrary, a grave Tone is ex-  
cited by the Collision of a Body which is only capable of stow  
and protraited Vibrations, it must of course follow, that the -  
*Membrana Tympani* does, in its various Degrees of Tension  
and Relaxanon, adapt itself to the several Natures and States  
of sonorous Bodies, and assume, if f may fo fpeak, their  
respective Characters. For Instance, it' is render’d tenfe for. ..  
the Reception of acute Sounds, because; in such a State os  
Tension, it is sirsceptibleof quick and instantaneous tremulous  
Motions. ’Tis, on the contrary; relax’d for the Admission  
and Conveyance of grave Sounds; because, during sucti a Relax-  
ation, \*tis qualified and disposed for the Reception of the more  
stow and langnid Undulations of the Air. In short, it is ren-  
dered tense and relax’d in a thousand different Degrees, accord.,  
ing to the various Natures of different Noises and Sounds : But  
I must confess, ’tis no easy Matter to comprehend the Manner  
in which all this is brought about; for these mechanical Mo-  
tions are not subjeoled to out Senses, and consequently it must  
be very difficult, if not impossible, to explain their Natures;  
and the several sews to which they are subjected. .

The *Membrana Tympani,* then, receives the various tremu-  
lous Motions of the Air, and, when not disorder’d, faithfully  
conveys them to the other Parts of the internal Ear. But it .  
performs these Functions in confequence of its being dry, thin,  
and diaphanous; and if its State is changed, with regard to any  
of these three Qualities, ttis no Wonder, if the Hearing becomes  
of course proportionably duller.

’Tis pretty probable, that the Air lodged in- the internal Ear;  
heing put into a Commotion by the tremulous Motions of the  
*Membrana Tympani,* serves at least in fame measure to convey  
thefe Motions to the immediate Organ of Hearing: But ’tis  
by no means probable, that fo sinall a Quantity of agitated Ain  
is able to put the *Os Petrosam,* or rather the Labyrinth con-  
tained in it, into a Commotion sufficiently strong for the Pur-  
poses of Hearing; S0 that we may, with greater Appearance of  
Truth, affirm, that the Agitations of the *Membrana Tympani*are communicated to the *Malleus.,* that the *Malleus* conveys  
them to the *Incus*; and the *Incus* to the *Stapes,* whose Agita-  
tion at last puts the Os *Petrofum* and Labyrinth into a Commo-  
tion ; just in the same manner as the intermediate Air hetween  
two Lutes, placed on the same Table, is not able sufficiently to  
convey the tremulous Motion of the String of one of the Lutes  
to the corresponding String of the other; unless the String, which  
is struck first, agitates the wooden Pistes to which it is affix’d,  
these Plates the Table, the Table the Plates of the other-Lute,  
and these Plates at. last that particular String affix’d to them,  
which is in Unison with the String which was first struck. Now,  
that this Effect is produced precisely in the manner now fpecti  
fied, is plain from this Circumstance, that if either of the Lutes  
is held at never so little a Distance from the Table, the Experi-  
ment does not succeed. .

The Nature, Mechanical Structirre, and Articulation of  
these three fmall Bones, seem very much to favour this Con-  
jectirre; for, in consequence of their Hardness; Driness, and  
Smaliness, they must be very easily put into a Commotion.  
The *Manubrium* of the *Malleus* is uninterruptedly affix’d to the  
*Membrana Tympani,* in its whole Length: Hence ’tis obvious;  
that this Membrane cannot be put into Commotions, without  
communicating its tremulous Motions to the *Manubrium,* and  
fo on successively to the other Bones, which are join’d by a  
mutual Articulation ; and, as this Artioulation is without the  
Intervention of Cartilages, it must of course facilitate the Com-  
munication of Motions from one to another.

- ’Tis no easy Matter to determine the precise Use of the *Muse  
cuius Stapedis.* , However, we may reasonably conjecture, that  
by drawing the Basis of the *Stapes,* which is placed immediate:.  
ly above the *Fenestra Ovalis,* a little outwards, it renders the  
Pellicule, with which the superior Part of this Basis is rever’d,  
tense; and that, according as it renders it more or lefs tenfe,  
it gives it a proportionably greater or less Disposition for re-  
ceiving the tremulous Motions of the *Aiembrana Tympani, in.*order to he convey’d to the *Vestibulum* and *Labyrinth.*

We may farther add, that this Muscle, by drawing **the***Stapes,* which is otherwise pretty flexible, renders it in some  
measure teofe, and keeps it in a firmer State, and consequently. .  
disposes it for the hettet Reception of the tremulous Motions of  
the *.Malleus* and *Incus.*

On the Sides of the *Tympanum uses* two *Meatuses,* or Con-  
veyances, one of which terminates in the Palate, but the other  
is continued to the Sinuses of the *Acothssts Mastosdes.* ’Tis

not improbable, that the Air contained in the *Tympanum* retires  
into these two *Meatuses,* when the *Membrana Tympani* is drawn  
inwards, and that it again returns into the *Tympanum,* when this  
Membrane as relax’d ; otherwise the Motion of the *Membrana  
Tympani* might he obstructed by the Resistance and Elasticity  
of the Air; and, indeed, one may reasonably, believe, that the  
Return of this Air into the *Tympanum* savours and assists the  
Reduction os that Membrane to its natural Situation.

The Conveyance from the Palate to the Ear supplies a Fund  
of Air necessary for renewing, at Intervals, that which is lodg'd  
in the *Tympanum t* But, that the Coldness of the external Air  
may not prove injurious to the Parts of the internal Ear, it un-  
dergoes all those Modifications, which are necessary to render it  
suitable to the Parts to which it is to he convey’d, whilst it  
ascends thro’ the Nostrils, and during the Whole of its Passage  
to the *Tympanum.* Neither by this means does it lose that De-  
gree of Elasticity, which renders it fit for the Purposes to which  
it was destin'd. For this Reason the Ain which returns from the  
Lungs, and which is. tainted with impure Vapours, cannot  
easily enter this *Meatus* or Conveyance, fince its Orifice is so  
situated and disposed in the Mouth, as rather to adinit the Ain  
drawn in by the Nostriis, than that which returns from the  
Lungs. Almost every one believes, that some deaf People are,  
by, means of this Conveyance, enabled to hear the Sounds pro-  
duced by such musical Instruments aS have Strings ; and since  
their Deafness is owing to a Defect of the *Membrana Tympani,*as to the Performance of its Office, it is not to he wondered at,  
if the tremulous Motions of the external Ain being communi-  
cated to the Tympanum by means *of* this Conveyance, these Per-  
sons should hear the Sounds of musical Instruments: But in  
order to shew, that those Commotions of the Air, contained  
in the Tympanum, which are produced by the Impulse of the  
Air carried through the *Meatus* or Conveyance, are not suf-  
ficient to enable deaf Persons to hear the Sounds of any musical  
Instruments, let it he observed, that these Persons must lay  
hold of the Handle of the Instrument with their Teeth, other-  
wise . they will not hear the Sound at all, or at least not so  
distinctly. Hence we may infer, that the Teeth, heing by  
this means put into a Commotion, communicate a tremulous  
Motion to the Jaw-bone, the Temporal Bones, and the small  
. Bones more immediately employ'd in the Offices *of Hearing,  
and* this seems to savour my Conjecture relating to the Use of  
these small Bones; for People, who are by no means deaf, hear  
the Sounds of musical Instruments in a stronger and more forci-  
ble manner, if, after having shut up their Ears, they lay held  
os the Handle of the Instrument with their Teeth. There are  
also some deaf Persons, who hear far hetter when the Voice is  
utter'd above the Crowns of their Heads: In these Persons the  
whole Cranium is, by this means, put into a Commotion,  
which is successively convey'd to the *Ossea Petrosa,* and all the  
other Parts employ'd in Hearing.

The *Fenestra Ovalis* is entirely block'd up by the Basis of the  
*Etapes.* Aster this dry and small Bone, one of whose Sides is  
covered with a Membrane, and whose Basis is very flender, has  
received the tremulous Motions of the other two Bones, and  
of the Air contained in the *Tympanum,* it can easily communi-  
cate them to the *Vistibulum,* and to the Air contain'd in it,  
and thence to the *Cochlea,* and the three semicircular Ducts.

Besides the *Fenestra Ovalis,* there is another called the *Fene-  
stra Rotunda,* winch, is shut up by a Membrane not unlike the.  
*Membrana Tympani.* We may conjecture, that this *Fenestra  
Rotunda* receives the tremulous Motions os the Air contained  
i in the *Tympanum,* and conveys them to that included in the in-  
ferior Part of the *Cochlea,* in which the Ah heing strongly com-  
press'd, for want os an Exit, is excellently calculated for put-  
ting the *Lamina Spiralis* into Commotions; and thus the tre-  
mulous Motions of the Ain are convey'd to the immediate Or-.  
gan of Hearing itself, of which we come now to speak.

This Organ, then, is comprehended under the general Name  
of *Labyrinth,* which, being included in the *0s Petrosum,* con-  
sists os two principal Parts, the *Cochlea,* and the *siefl'ibulum,*together with their three semicircular Ducts.

As for the *Cochlea,* no one can doubt of its heing a consti-  
tuent Part of the immediate Organ of Hearing, fince this is suf-  
ficiently proved by its Make and Structure; for, first, the  
*Spiral Lamina,* which is a principal Part of it, is hard, dry,  
flender, and easily broken, all which Conditions are absolutely  
requisite in Bedies susceptible os tremulous Motions. Secondly,  
*this Lamina* does not he within the semioval Spiral Canal ; but  
is stretch'd out betwixt the *Spindle* to which it adheres, on one  
Side, and the flender Membrane which is join'd to the Surface  
*os* this Canal, to winch it adheres, on the other ; so that this  
Situation os the *Spiral Lamina* remarkably savours the Dispo-  
sition or Tendency it ought to have, to he easily and readily put  
into a Commotion.

Thirdly, the *Spiral Lamsna,* by means of thin Pellicule,  
divides the Whole of the Spiral Canal into two Orders, as it.  
were, of Gradations, whose Construction resembles that of a  
winding Shell, which rest upon the same Spindle, and of which  
the superior does not at all Communicate with the inferior Order..

**The *Fenestra*** *Rotunda* opens within the inferior Order, **and**has no Communication either with the superior Order of Gra-  
nations in this Canal, nor with the *Vistibulum :* By this means,  
therefore, the Ain included in the inferior Order is both agitated  
by the tremulous Motions of the *Fenestra Rotunda,* and by the  
Vibrations Of the Ain contained in the superior Order of Gra-  
dations of the semioval Canal; which is itfelf put into a Com-  
motion, both by the tremulous Motions of the Air contained  
in the *Vistibulum,* with which it communicates, and also by **the**vibratory Motions of the Ain contain'd in the inferior Order of  
Gradations in this Canal: And thus the undulatory Motions  
of the *Spiral Lamina* must he rendered more briik and lively,.  
fince it is agitated on both Sides.

Fourthly, the Spinal Figure of this *Lamina* seems greatiy to  
support the Truth of the above-mentioned Circumstances ; for,  
whilst it makes two Circumvolutions and an half round the  
Spindle, it, in several Parts, receives the Vibratory Motions of  
the Ain; and this same curious Piece of Mechanism is observ'd  
in the Structure of the Tongue and Nose.

Fifthly, when the large Branch of the soft Portion of the  
Auditory Nerve arrives at the Basis of the *Cochlea,* it is divided  
into a great Number of smaller Branches, which, passing thro’  
all the small Meatuses, with which the *Spindle* is perforated, are  
distributed to the Various Windings and Meanders of this *Spiral  
Lamina,* where they lose themselves. In a Word, this *Lumina*is not only calculated for receiving the Vibratory MotionS of  
the Air, but its Structure also ought to he look'd upon as a  
convincing Proof, that it is qualified and disposed for accom-  
modating itself to all their different Characters and Degrees of  
these Motions ; for fince it is broader at the Beginning of its  
first Circumvolution, than at the Extremity of its last, and  
fince the Breadth of its other Parts are, in like manner, propor-  
tionably diminished, we may venture to affirm, that its broader  
Parts are only fit for the Reception of stow and languid Vibra-  
tions, which are productive of grave Tones, fince they may he  
put into a Commotion without its other Parts undergoing any  
Change ;. and, *vice versu,* that, when its narrow Parts are  
struck, their Vibrations are briik and lively, and consequentiy  
produce acute Tones or Sounds; just in the same manner aS the  
broad Parts Of a Steel-spring excite flow and languid Vibrations,  
which are productive of grave Tones; whereas its narrow  
Parts excite more frequent and briik Vibrations, and confe-  
quentlyare productive of acute Tones. In a Word, therefore,  
according to the Various Commotions of the *Spiral Lamina,*the Nerves, distributed thro' its Substance, receive the various  
impressions of the Ain, which exhibit and represent Various  
Tones, or Modulations Os Sound.

As for the *Vestibulum,* and the *three semicircular Ducts,* tho\*  
some imagine, that they only servo to heighten and augment  
the impression of the tremulous Motion of the Ain; and others,  
that their Use consists in diminishing and lessening this impress  
fion ; yet the following Reasons induce me to think, that they  
are constituent Parts of the immediate Organ of Hearing.

First, all Birds heve only three Canais or Ducts, bended into  
a semicircular Form ; and a fourth, which is strait, and shut at.  
one of its Extremities, but which, with the others, opens into  
the common Cavity, which serves instead of a *Vestibulum* **to**them. These three Ducts are also found in Fish; but the*Cochlea* is neither found in Birds, nor in Fish, and yet both,  
hear. 'Tintherefore obvious, that these semicircular Canais mush  
**he the** immediate Organ of Hearing, both in the one and in the  
other. Why, then, should not they he subservient to the same  
Uses in Man, since, in all these three Species of Animals, their  
Structure is alike ? Hence it follows, that these three semicir-  
cular Ducts must, at least, he a constituent Part of the imme-  
diate Organ of Hearing; and that thus that Organ must com.  
fist of two essential Parts.

. Secondly, nobedy doubts, but that the soft Portion of the  
Auditory Nerve conveys the Impressions of Sounds to the Brain ;  
but two Branches of this soft Portion enter the Cavity of tho  
*Vestibulum,* and are diffused and expanded into the Filaments  
and Membranes, which constitute the internal Coverings of the.  
*semicircular Canals t* Hence I conclude, that this Part of the  
*Labyrinth* also constitutes a Part of the immediate Organ of  
Hearing. . . :

Thirdly, fuch is the Mechanism and Structure of *rsae Vesti-  
bulum,* and *semicircular Ducts,* that we may, upon good  
Grounds, suppose, that the Impression of Sounds is augmented;  
and heighten'd in their winding Meanders, and consequentiy i  
hetter qualified for putting the Nerves, dispersed in these Places,  
into a Commotion. . .

But what I just now assarted of the *Spiral Lamina,* which is,  
that it did not simply receive the Vibrations of the Air, and.  
that all its Parts were not indiscriminately adapted and accom- :  
modated to the same Tones or Sounds, holds also good with  
regard to **these** *semicircular Ducts.* Each of thefe Ducts, in :  
Figure, resembles two Trumpets, whose narrow Extremities  
are joined together; for both Orifices of these Canals, **in the**Cavity of the *Vestibulum,* are sound to diverge like the **wine.**Extremity of a Trumpet ; and their middle Part, which is just-:

ly represented by the Place where the two Trumpets, are join’d,  
is proportionably narrower. Two of these Canals have one  
common Opening within the *Vestibulum,* and at the same time  
expand their Extremities Very wide, inComparison of the others:  
But Experience proves, that the larger Circles, at the broad Ex-  
tremity of a Trumpet, may be put into Commotions, at the  
same tunc that the lefler Circles are subjected to Iro sensible  
Change or Commotions whatsoever ; and also, that the Vibra-  
tionS of the larger Circles are flower, and more sensible, and  
that, in this Case, the Trumpet produces grave Sounds. On the  
contrary, 'tis equally confirm’d by Experience, that when the  
lesser Circles of this wide Extremity of the Trumpet are put  
into Commotions, the larger in the mean time remaining with-  
out any sensible Motion, an acute Sound is produced by the  
Trumpet; because the Vibrations of these smaller Circles are  
brisker, and more frequent, than in the former Cose. The same  
holds true with regard to the *semicircular Canals*; for their  
wider Parts may he put into Commotions, whilst the others  
remain unmoved ; at which time the Vibrations of these Parts  
will he flow, a Circumstance necessarily productive of grave  
Sounds. On the other hand, when the narrower Parts of those  
Canals happen to be put into a Commotion, whilst the wider  
and more diverging remain unmoved, an acute Tone will neces-  
sarily be form'd; because the Vibrations of these narrower  
Parts will be proportionably quicker. From what has heen said,  
we may then justly conclude, that the *Cochlea,* and *semicircu-  
lar Ducts,* are common and immediate Organs, which not only  
receive the vibratory Motions os the Air in general, but also  
the genuine Qualities and different Characteristics of Sounds,  
according to the different Parts os these Organs, which happen  
to be put into Commotions. . . ’.J

It may possibly be objected, that these semicircular Canals  
are too solid, and adhere too strongly to the rest of the *Os Pe-  
irasurn,* to he so easily moved in their Various Parts, and in so  
many different manners : But, besides that a considerable Noise  
**can** scarce he excited without the *Os Petrosum* being put into  
a Commotion, when these Circles are prepared for the. sake of  
Anatomical Demonstrations, 'tis obvious, that they are only  
surrounded with a kind os spongious Substance. In the Heads,  
indeed, of old People, the bony *Lamina,* which cover these  
Circles before and behind, are pretty hard; but that Substance,  
which filis up the Space round about these Circles, is os a more  
porous Nature; for which Reason they are always sufficiently  
free and disengaged, and easily susceptible of Commotions and  
Vibrations. -

The mutual Sympathy and Connexion hetween Hearing  
and Speech generally uses to be accounted for by the Commu-  
nication of the soft Portion of the Auditory Nerve with those  
Branches of the fifth Pair of Nerves, which run off, and are  
distributed to the Parts destin'd for the Formation and Mod u-  
lation os the Voice ; for Anatomists think, that the Commo--tion of the Nerves of the Ear is propagated to the Nerves of the  
fifth Pair; whence the Spirits which .flow from the Brain into  
those N erves, which are distributed to the Parts destin'd for the  
Formation of the Voice, dispose then Muscles in such a pecu-  
liar manner, as to form Sounds exactly corresponding and simi-  
lar to the Impressions made on the Brain by the Voice. For  
this Reason 'tis said, that Men and Birds can mutually incite  
each other to fing; and that those who are deaf from their  
Birth, must of course he dumb too.

Anatomists are also of Opinion, that the Communication of  
the second Vertebral Pair with the external Ear, is the Reason  
why, upon hearing the least Noise, we turn our Heads to the  
Quarter whence it comes; and why the Whole of the Body is  
disposed to Varinus Motions, according aS the Causes of the  
Noife are imagined so be hurtful or beneficial to itself: And  
fince these Nerves communicate with those of the Lungs and  
Heart, hence it is, that we become sensible of proportionable  
Alterations in our Pulse and Respiration, according to the Di-

\* versity of Noises. But all are not agreed with regard to the  
Effects of all. these Communications.

**DISEASES** *of the* **ORGAN of HEARING.**

Having th us. given an Account of the Structure, and several  
Uses, of the Organ of Hearing, it now .remains, that I consider  
the several Disorders incident to the Ear: And in executing  
this Part of my Design, I shall have a particular Regard to the  
Structure of this Organ, that it may appear, how indispensably  
necessary a Knowledge Of the Parts is, in order to explain sand  
account for its Diseases. Neither shall I follow the several Di-  
visions of these Disorders commonly proposed by different Ass  
shots; but, adhering to the Method I have hitherto observed, **I**shall first examine the Disorders incident to the external Parts  
of the *Ear*; then I shall consider those which attack the *Mem-  
brana Tympani,* the *Tympanum,* and *Labyrinth*; after winch I  
shall take a View of thofe which affect the Auditory Nerve  
itself; and, in the last place, shall explain and account for what  
we call *^.Tinnitus Aurium,* since it is a common Symptom in all  
the Disorders incident to thofe Parts ; and whatever I advance  
shall he supported by the Authorities Of good Writers. , and **the**

the Discoveries which I myself halon made on the several  
Occasions, when I have had an Opportunity of dissecting **the'**Ear.

The Symptom which most commonly attacks the external  
Parts of the *Ear,* is a Species of Pain winch the *Greeks* called  
*Otalgia :* This Symptom generally seizes the *Concha,* and the  
Whole of the *Meatus,* aS sar aS the *Membrana Tympani* . and  
Experience affords us a certain, but melancholy Proof, that it  
is accompanied with Function, Erosion, Tension, Pulsation,  
and a Sense of Weight.

Though 'tis not necessary on this Occasion to explain the  
Nature of Pain in general, yet 'tis not amiss to observe, thet it  
arises from aSolution of Continuity in those Particles, by whose  
Union animal Bodies are originalsy formed ; for this Solution of  
Continuity throws the animal Spirits' into preternatural and  
tumultuous Commotions ; and in these two Circumstances the  
very Nature and Essence of Pain consist.

Upon this Hypothesis 'tis obvious to every one, that what-  
ever can occasion a *Solution of Continuity* in the Particles os that  
Membrane which covers the *Meatus* of the Ear, and excite  
this irregullst and tumultuous Motion of the animal Spirits,  
must of course prove the Cause os Pain. Thus Inflammations,  
extraneous Bodies falling into the *Meatus,* Worms, and, in a  
Word, wherever excites Pain in other Parts, are likewise capa-  
ble of producing the same Effect in the Ear. The Antients,  
indeed, imagin'd, that Pains of the Ears might he produced  
without Inflammation, and without the Concurrence of what  
they called a conjunct Cause \*. Hence they accounted for these  
Pains front abstract and immaterial Distemperatures, which,  
according to them, proceeded sor the most part from an Excess  
either os Heat or Cold. But since these immaterial Distem-  
peratnres have only an Existence in the Imagination, and not  
in the Nature of Things ; and since the Causes exciting these i  
Violent Pains may he found in the Parts themselves ; I shall give  
my Sentiments on this Particular, in as concise a manner aS I  
possibly can.

I find from Experience then, that the Wax lodged in the Ear  
is bitter and viscid, and consequently impregnated with acrid  
lixiVial Salts, mixed with pinguous and oily Particles. These  
Principles render its Qualities pretty much the same with those  
ascribed to the Bile, with which it agrees in many Particulars ;  
so that if on any Occasion these saline Juices should become .  
active and disengaged, or, being exalted above their common  
Pitch, should exercise their Spicuhe or Points more briikly than -  
in a natural State, 'tis evident they must create great Pain and  
Uneasiness in the *Meatus* of the Ear, on account os the exqui-  
site Sensibility of the Part. But this effect is *sor* the most part  
produced either by Heat or Cold; for Cold, by condensing  
this Wax, and rendering it more Viscid, is the Cause of its be- . '  
coming adhesive, and blocking up the excretory Ducts of the  
Glands, just as it happens in other neighbouring glandular Bo-  
dies, in which a like Action of the Air produces similar Ob-  
structions. Hence it follows, that the saline Juices, having ac-  
quired a Motion, must distend and tumefy the Glands in which  
they are lodg'd ; and that being rendered more acrid by their  
long Continuance, they must vellicate the tender Extremities  
of those Nerves dispersed thro’ the Membrane of the *Meatus ..*Hence arises a terrible Perturbation of the Spirits, and conse-  
quently an acute and racking Pain of the Eat. External Heat,  
on the other hand, divides and colliquates the saline Juices of  
this Wax, and by so doing produces the same Effect. The  
same is observed in Pains proceeding from the Bile excited by  
an Excess of Heat or Cold in the Parts'destined sor Nutrition.

But this Wax is not the sole and only Cause of these Violent  
and racking Pains; for it often happens, that an acrid and  
saline Serum, discharged from the Glands of the Ear, excites a  
Pain in the *Meatus;* and this plainly appears in the Suppura-  
tions winch happen in that Part; for when the Matter dis.  
charged is of a saline or acid Quality, it Vellicates the Mem-  
brane of the *Meatus,* and excites that ungrateful and uneasy  
Sensation which we call *Pain.*

As for the Difference of Pains in the Ears, I think they may  
he accounted for in this manner : When the Particles or Wax,  
or other Humours contained in the Glands, are become saline, ..  
acute, and rigid, and, by their tumultuous Agitation, put the.  
Filaments of the *Meatus,* which is full os Nerves, into a Com-  
motion, they excite a pricking Pain, which happens in all In-  
flammations, but more especially in Persons of dry and bilious  
Constitutions, whose Humours abound with acid and saline  
Juices of this Kind ; as also in People os melancholic Habits,  
whose *Serum* is also of an acid and saline Nature. When these  
Salts become Very acrid and corrosive, they produce, as in were  
a Sense os Erosion or Gnawing, which is principally observed in  
Ulcers of these Parts. When the Wax, whilst as yet contain'd  
in the Glands, ferments either by itself, or io Conjunction with  
any other Substance, the Particles os the Membrane are extended  
and dilated, and hence arises a Sense os Tension. And, lastly,  
when the Glands are become turgid by the too great Quantity  
of their Contents, a Sense os Weight is the Symptom of which  
the Patient complains. As fur that Species of Pain, which is

hecorftpany’d with Pulsation, I am of Opinion, that the Mea-  
rus is never attack'd by it, except in Cases where there is an  
Inflammation.

: The Violence of this Pain has something of a very singular  
and furprifing Nature in it ; for it scarce ever seizes the Patient  
without bringing along with it an acute Fever, winch is at-  
tended with an Incapacity of Sleep, Deliriums, Convulsions,  
and Paintings; which Symptoms very often prove mortal, as  
appears from the Observations of many Authors. But that we  
may conceive more justly the Violence of this Pain, we are to  
Observe,

First, that the Membrane, which lines the *Meatus Auditorius,*is very (lender, full of Nerves, and of the fame delicate Tex-  
ture with the nervous Coat of the Stomach and Intestines ; and  
that it has not, like them, a villous Crust to guard and defend  
it against the Acrimony of the Humours.

Secondly, this Membrane is stored with innumerable Nerves,  
arising from the fifth Pair, the hard Portion of the Auditory  
Nerve, and the second Vertebral Pain; so that this Membrane  
may justly be said to contain more Nerves, *cat er is paribus,*than any other in the human Body. \*

Thirdly, 'tis certain, that those Membranes which adhere th  
Bones, are possess'd of a far more exquisite Power of Sensation  
than others; which may probably be owing to this, that heing  
firmer, more tense, and adhering to the Bones, by means of  
all the minute Vessels with which they supply them, 'tis im-  
possible they should be vellicated, without at the same time all  
their minute Filaments being put into a Commotion. Hence it  
is, that the *Periosteum* and *Pericranium* are endow'd with so  
acute and exquisite a Sense os Pain ; and perhaps, for the same  
Reason, Violent and racking Head-achs are owing to the Adhe-  
ston os the *Dura Mater* to the superior Part of the *Cranium, as*has been observed by some. This may easily he applied to **the**Membrane of the *Meatus Auditorius,* which is partly bony, and  
partiy cartilaginous; and as that Part of the Membrane which  
lies upon the Cartilage, is not so tense as that which lies upon  
the Bones, hence it happens, that those Pains which are felt  
in the Bottom of the Ear, and which heve their Seat near the  
bony Part of the *Meatus,* are of all others the most severe and  
racking.

Fourthly, the Connexion of this Membrane with the neigh-  
bouring Parts, which are endowed with an exquisite Power of'  
Sensation, may also contribute very considerably to the Violence  
*os* this Pain ; sor this Membrane is extended as far as the *Mem-  
brana Tympani,* which communicates with the Membranes of  
the *Tympanum* and *Labyrinth* ; and, by their means, with the  
*Dura Matcr* itself. Is we carefully consider these Circum-  
stances, we have no Reason to be surprised, that the Pains of  
the *Meatus* should prove so severe and torturing.

Though most os the Symptoms which accompany the Pains  
of the *Meatus,* may also occur in Pains of other Parts ; yet as  
these Symptoms are most common, and most Violent in it, **I**thought it might not be improper to account for them.

When the Pain proceeds from an Inflammation, 'tis no diffi-  
cult Task to account sor the Fever, and the Train of other sub-  
sequent Symptoms ; but as I am thoroughly persuaded, that the  
V iolence of the Pain alone may produce these Symptoms, with-  
Out either Inflammation or Tumor, I shall confine myself pre-  
cisely to this Supposition, and consider the Subject in this  
Light.

I shall hegin then with thet acute Fever, which almost al-  
ways accompanies a Pain of the Ear ; and I helieve it may be  
Owing to this, thet the Spirits being hurried into preternatural  
and tumultuous Agitations by the Violence of the Pain, aug-  
ment the Motion of the Heart and Arteries:. And hence pro-  
ceed fuch an elevated Pulse, and an intense Heat, as are ob-  
servable when the Mind is under the direct Influence of any  
lawless and exorbitant Passion, especially that os Anger. But  
this accelerated Motion of the Heart and Blood could not pro-  
duce a Fever, without inducing a Change on the Principles of  
the Blood itself. Now 'tis no great Difficulty to conceive,  
that when, by these strong and vigorous Contractions of the  
Heart, the Parts of the Blood are more divided and broken, its  
most active Parts should be then exalted, and its oily Part,  
whose accelerated Motion produces the febrile Heat, dissolved.  
Besides, the acrid and corrosive Juices of the Wax, and other  
Humours, accumulated in the Ear, may again be mixed with  
the Mass of Blood, and there produce a preternatural Ferment-  
ation, in which the very Essence of a Fever consists. We shall  
he easily able to form a Judgment of the Nature of this Fever,  
**if** we consider, that Fevers, in Catarrhs and Rheums, are no  
otherwise produced, than by the Commixture of the acrid  
Juices, which, separating from the Mass which constitutes and  
cherishes the Rheums, join themselves to the Blood.

*Though what* Du Verney *fays of the .Distempers of the Ear  
, merits Attention, I must apprise the Piaster, that a great deal  
of durhat he Jays with respect to Fevers, if „Ot i0 depended an,  
heing mere jargon.*

The Incapacity of Sleep depends upon the preternatural Aed-  
. ration of the Spirits, which, being irritated by the Violence °Qf

the Pain, **flow** continually into the Parts, **and do** noir **permit**them to cease from performing their Functions.

The *Delirium* does not differ from the Incapacity of Sleep,  
except that, in the former, the Spirits having acquired an irre-  
gular Motion in the Brain, imprint, as it were, many Traces  
upon the Memory and Imagination at one and the same time:  
Hence arises that furprifing Confusion of Ideas, winch these Spi- "  
fits exhibit to the Mind.

Upon this Hypothesis the Convulsions are also Very easily ac-  
counted for, and explained; for since the involuntary Con-  
traction of the Muscles depends upon the tumultuous Motions of  
the Spirits, no more is requisite, than that the saline Juices should  
stimulate the Nerves dispersed in the Membrane of the *Meatus,*in order to transmit this Stimulus or Irritation to all the Spirits,  
by the Communication *of* the Nerves and Membranes ; and this  
Irritation afterwards proves the Cause of ConVulsions in the  
Muscles. Besides, it may happen, that these acrid Juices should  
return into the Mass of Blood ; and being carried to the Brain,  
there irritate the Origins of the Nerves.

In order to conceive in whet manner the *Lipoihyrnia* or  
Fainting is produced, let us only consider, thet whilst the Spi-  
rits flow with Rapidity, and in great Abundance, into the mus-  
cular Fibres, which contract and shut the Orifices os the Heart,  
they stop the Motion of the Blood ; and that when this Con-  
traction ceases, and the Blood again enters the Ventricles of the  
Heart, the Pulse hegins again to beat, and Warmth returns.  
The Uneasiness about the Heart, and the Oppression of **the**Breast, which are felt in this Case, sussicientiy prove that **the**Fainting proceeds from the Couse now assigned ; and indeed  
this Uneasiness of the Heart may sometimes continue so long,  
as to prove the immediate Cause of Death.-

As an instance of a Violent Pain in the Ear accompanied with  
the most formidable Symptoms, I shall only bring the fourth  
Observation, of the first Century, of *Fabricius Hildanus,* be-  
cause it seems to comprehend all the principal Symptoms which  
occur in this Disorder. " Whilst,'' says he, " a Girl os ten.  
" Years of Age was taking her Diversion with her Companions,  
" a Glass Bead, as large as a Pea, flipt into.the Cavity of her  
" Lest Ear. Her Mother, being apprised .of the Accident,  
" called a Surgeon to extract it; but his Attempts were in Vain.  
Ci Then a second, a third, and a fourth, were called at differ-  
" ent times; but the Patient was so sar from being relieved by  
" any of them, that the Glass Globale was lodged still deeper  
" and deeper by their Attempts to extract it. Upon this the  
" Mother despaired os the Possibility of difledging it; and tho\*  
"she was grieved for the Fate of her Daughter, who was rack'd  
(t with uninterrupted Torments, yet she refolved to submit to  
" the Will of Heaven, and patientiy wait for the Result of  
" Nature's own Operation. Soon after, the Pain of the Ear  
" was indeed allay'd; but all that Part of her Head, as sar as  
" the Longitudinal Suture, was excessively painful, both in  
" the Night and Day-time, tho' her Pains were acute, or **the**" Reverse, according to the State and Constitution os the Air.  
" Her Torments were most severe in moist and rainy Weather,  
" such as whet we usually have in the Winter and Autumn»  
" Besides, - her Left Arm was seized with a kind of Stupor,  
" which reached aS sar as her Thumb and sore Finger, and af-  
" fected her Loins, her Leg, and her Foot; and, in shots,  
" her whole Left Side languished under these Stupors. But  
(t her Torpors afterwards assumed another Shape; and in the  
" Night-time, and during cold and moist Weather, appeared in  
" Violent Pains of her Shoulder, Arm, and Leg. She was con-  
ic tinually afflicted with a dry Cough; and her monthly Eva-  
" cuations, being in a great measure suppressed, flowed either  
" Very sparingly, or only once in the Space of three Months.  
." Aster she had groaned under this Load of Misery sor four or  
*(t five Years, she* at last began to be now-and-then seized with  
“ Epileptic Fits, and the Arm itself sell into an Atrophy. Her  
" Mother, startled at the Appearance of such formidable Sym-  
" ptoms, employed several Physicians, Surgeons, and Empi.-  
" ‘ tics ; and aS she had no Pain in her Ear, (for it seems the  
" Intenseness of her other Pains had in a manner destroyed it)  
" she only complained of the other Symptoms, neglecting and  
" overlooking the original Cause of the Disorder. But all their  
(t Efforts for her were Vain and fruitless ; and the Symptoms  
" were so sar from heing abated, that they were rather aug~  
" mented. At last, in the Month of *November* I595. she ap-  
" ply'd to me *(Hildanus).* I purged her several times, .  
" anointed her Shoulder, her Arm, and the rest os the Parts  
" affected, with hot and anodyne Olis ; and, in short, ap-  
" ply'd every thing winch to me seemed calculated for remove-  
" ing her Disorder ; but, notwithstanding all my Attempts, I  
" had as littie Success as those who had gone before me.  
" When I saw,, that her Disorder would yield to no Medicines,  
" however proper, I began to despair os her Recovery, for!.  
" was entirely ignorant of the Caufe of her Disorder, unless it  
" might have possibly proceeded from a Catarrh. In the mean  
" time, whilst I was considering with myself whet more effi-  
" cacinus Measures I should take for her Relies, she herself  
" began to give me an Account of the Cause of her Disorder,.

te though the was not sensible of its being so; for she told me,  
" that, about eight Years ago, a small Glass Bead had flipt into  
(c her Ear, which could not afterwards be diflodged. Upon  
ci hearing this Circumstance, I began to suspect, that it might  
" possibly be the Caufe of her subsequent Torments: And  
" though she was very averse to an Operation; on account of  
et the fruitless Attempts Of the other Surgeons, when her Dis-  
" cafe was recent, yet at last she submitted to undergo it;  
" upon winch I happily, and without any Violence, extracted  
44-the Bead, though it was lodged very deep, near the *Tym-  
- panum,* and stuck very firmly in the Sordes of her Ear. The  
" Pains of her Head, and of the other Parts of her Body, soon -  
" after disappeared, and next Night she was a littie better:  
" Thus, by gently anointing the Parts with Oil of Worms,  
tc she gradually recovered. Her Pains, her Stupors, her Epi-  
Ci leptic Fits, and all her other Symptoms, disappeared ; her  
*" Arm* also was restored to its natural State ; and, by the pecu-  
" liar Blessing of Heaven, she: has continued in perfect Health  
" over since."

- Many things relating to this Observation of *Hildanus* might,  
on this Occasion, come under our Consideration ; but as I have  
already explained the principal Symptoms with winch the Pati-  
ent was afflicted, I shall only insiston some of file most peculiar  
Circumstances of her Case. Pains then, and Convulsions,  
seized the Whole of her Left Side, and reached as sar. as her

. Foot. *Hildanus* accounted sor this Symptom by saying, that'  
the hard Portion os the auditory Nerve-was distributed through  
all the Arm and Thigh ; but since this Distribution is purely  
chimerical and imaginary, I shall 'endeavour to account for  
this Symptom in a manner more consonant and agreeable to the  
real Structure and Conformation of these Parts. I say then,  
that the Irritations and tumultuous Motions of the Spirits were,  
by the Communication os the second Vertebral Pair, transmit-  
ted and conveyed to all the Nerves proceeding from the spinal  
Marrow on that Side; which would not have happened, is the  
Irritation had been communicated to the Brain ; sor in this Case  
'tis probable, that the Patient would have heen afflicted with  
Pains and Convulsions in all the Parts of her Body. But on **the**Supposition, that the spinal Marrow on her Left Side was af-  
fected, we may easily conceive in what manner the Disorder  
was communicated to her Ann and Leg, since we Very well  
know, that all the *vertebral Nerves* of that Side communicate  
with each other by transverse Branches; after they have gone  
**out** of the *Foramina* of the *Vertebra.*

. All the Symptoms were aggravated in the Night-time, and  
In rainy Weather, on account os the Humidity of the Air,'  
which, as it rendered the Glands and Membranes of the Mea-  
tus tumid, was the Cause of their embracing the fatal Bead  
more closely, and hence the Irritation was augmented.

The Stupors might, in all Probability, arise from this, that  
the irritated Spirits opened and dilated the Orifices of the  
Nerves to such a Degree, that they not only gave Admission to  
the Spirits themselves, but also to some gross Substances, which,  
being crouded into their small Ducts, produced a kind of Ob-  
struction, sufficient to stop the Motion of the Spirits. A Cir-  
cumstance abundantly able to bring on a Stupor l Besides, these  
gross Substances, bring rendered more acrid by their Continu-  
ance, must of course have augmented the Pains and Convulsi-  
ons. And when these made their most Violent Attacks on **the**Patient’s Arm, its Nerves must heve been block'd up with such  
a Redundance of this extraneous and noxious Matter, as to in-  
terrupt the Motions of the Spirits: Hence the Arm was ema-  
oiated and wither'd, as in a Palsy.

-The Bead bring at last extracted, the Irritations caused by it,  
and consequently the Pains and Convulsions, ceased ; upon  
which the Spirits again resuming their usual Motions, dissipated  
all extraneous and noxious Substances: Hence the Arm was  
restored to its former Motion and Vigour.

I now come to treat of the several Measures to he taken in  
the Cure of Pains of the ears; and these ought to Vary, accord-  
ing to the different Couses which produce the respective Disor-  
ders. As for those Pains of the Ears produced by Cold, they  
are sometimes cured only by removing the external Causes;  
or, in other Words, by defending the Ear from the Cold and  
Winds, and applying to it every thing that can warm it, such  
as greasy Wool, or het Bread dipt in Spirit of Wine. But for  
the most part the Pain does not yield to these first Applications,  
in which Case we must have recourse to general Remedies.  
Venesection is necessary, in order to prevent the Congestion of  
**the** Matter pent up by the Cold : But Purgatives ought not to he  
exhibited, till the Pain is somewhat abated. Fomentations in  
the mean time are used with Success, or Injections of the Juice  
or Decoction of Bawm, Hyssop, Calamint, Origanum, and  
Marjoram; to which may be added a few Drops of the Gall of  
an Ox, or of the Oil of bitter Almonds, Chamomile, Cloves,  
**or** Anise ; and some Physicians highly recommend the Practice  
Of stopping the Ears with Cotton impregnated with Muik.  
'Tis no difficult Matter to account for the Effects of these Me-  
dicines, fince they are all impregnated with a highly penetrate-  
ing Volatile Salt, which, by warming all the Parts, opens the

Pores and Emfinctories of the Glands ; and promotes, a Dily  
charge of the peccant Matter pent up and detained by the Action  
of the Cold. . . ...

Pains of the Ears, proceeding front an Excess of Heat, are  
for the most part carried off by general .Remedies, and especially  
Venesection, which is absolutely necessary, in order to prevent  
the Fluxion and inflammation which might otherwise seine **the**Parts affected. During the Use of these Remedies, we may  
Very successfully use Injections of Milk beaten up with theWhite  
of an Egg; and for this Purpose Womens Milk is sar more  
proper than any other whatsoever. Injections may be also  
made of some emollient and cooling Decoctions, in which a  
proper Quantity of the Oil of sweet Almonds has been diluted.  
The Oil of Eggs is also highly extoll’d.in this Case, by *Jo.de  
Vigo.* We may also apply over the *Ear* some anodyne and  
emollient Cataplasm ; and,, when the Pains are extremely Vio-  
lent and acute,, we must heve recourse to Narco tics,, which are  
not only to be mix'd with, the topical Applications, but may  
also he exhibited internally.. All these Remedies are. so well  
known, and so universally us'd, that I shall not spend Time in  
accounting for their Effects.

- When Pains of the *Ears* are produced by De fluxions of art  
acrid and saline Serum, we in that Case use the Water of *Car-  
duus Benedictus,* in which Millepedes, Earth-worms, and Ants  
Eggs, have been boiled ; to this Decoction we may also add a „  
few Drops of the Oil of Box. As these Remedies abound in a  
volatile alcaline Salt, they destroy that Acidity os the serous  
Humours; which was the primary Cause of the Pain.

r Another Disorder to which the *Meatus Auditorius* is subject,  
is Inflammation, which is generally succeeded by Abscesses and  
Ulcers. This Inflammation is the Consequence of Wounds or  
Contusions in these Parts, and may even be produced by some  
Fevers, .as well as a Pleurisy, .aQuinseyamand several other Dis-  
orders Of an inflammatory Nature.? An Inflammation .may  
happen in the *Meatus Auditorius* in two Manners: First, by ari  
Obstruction of the Glands, which, thy compressing the Vessels,  
is the Cause of the Blood’s stopping, and bursting the Vessels,  
in which it is contain’d. Secondly,, an Inflammation may be  
be produced in the *Meatus,* by the Wax acquiring such a De-  
gree off Acrimony, as to .corrode the Veffeis, and by that  
means occasion an Extravasation of the Blood. However, this  
Inflammation, and the subsequent Abscess, have nothing pecu-  
liar in their Symptoms, except the Violence of the Pain, of  
which I have already spoken.' ’ ... , \_ .

As for the Ulcers os. the *Ears,* they are form'd in the same  
manner with Ulcers os the other Parts, either by the Break-.  
ing; of an Abscess, or by the Acrimony of some Humour. **I**generally observe,, that a Very large Quantity os Matter is dis- .  
charged from these Ulcers, and that they are not cur'd without  
a.considerable deal of Difficulty, especially when they happen  
in the bony Part os the *Meatus.* The great Quantity of dis-  
charg'd Matter is supply'd, not only by the suppurating Blood;  
but also by the Glands, which, being irritated by.the Pus,  
furnish their excretory Ducts with a large Quantity os Liquor.  
As to the Difficulty of curing these Ulcers, 'tis owing to this  
Circumstance; that, being always moisten'd by he Humours  
flowing from the Glands, 'tis impossible .they should be dry'd  
up, 'till that glandular Discharge be rernoyd... Besides, **the**Matter secreted from these Glands being of an acrid and saline  
Quality, must, of Consequence, prevent their Reunion and  
Cicatrization. The same Symptom occurs in Ulcers of **the**Nose, and salival Ducts. Ulcers form'd in the bony Part of  
the *Meatus* are with inore Difficulty cured, than those ap-  
pearing in its cartilaginous Part; because. the bony Part of  
the Canal declines towards *sIae. Membrana Tympani,* and has  
a considerable Depressure at the Place where it declines,  
which is the Reason that the Pus is with Difficulty convey'd  
' Out of it; whereas the cartilaginous Part *of* the *Meatus* de-  
clining towards the *Concha,* Pus, and other offensive Substances,  
are easily discharged from it, and are not retain'd, as in **the**bony Part os the *Meatus: .........*

In old and sordid Ulcers of the *Ears,* Worms of different  
Sizes are sometimes discharg'd along with the Pus, aS we may  
.see in the Observations of *Forestus,Schenkias,* and in the *German  
Ephnncrides.* I shall not here inquire, whether these Worms  
are produc'd by the Corruption of the Humours, or whether **the**Heat of these Ulcers only hatches the minute eggs, which **the**numberless little insects floating in the Ain may have deposited  
on the Parts, since I shall afterwards have Occasion to handle  
this Subject. .

Besides the Pus discharg'd from the *Ears,* when Ulcers are  
form'd in them, we observe, that the *Ears* almost of all Chii-  
dren discharge a great deal of Humidity, and that this.EVacua-  
tion is very conducive to the Preservation of their Health. For  
this Reason we ought to beware os stopping thisDischarge, lest  
the Children should, by that imprudent Step, be thrown into,  
convulsive or epileptic Fits. This Circumstance has induced,  
some People to believe, that not only this Liquor, but also the .  
clear and fetid Serum Rowing from the *Ears* of some Adults,  
and the Blood evacuated from them when the Head is wounded.

proceeded from the Brain : But, ’tis certain, there are ήο ap-  
perent.Ways, ot Passages, by means of which any thing can he  
convey’d from the Brain to these Parts \* ; for in **the** *Os Petro-,  
scum* there is only one Hole, which is imperforated at that Ex-  
tremity which lies next the *Ear,* and which is closely shut up  
by the auditory Nerves; so that we cannot reasonably suppose,  
that any thing should he convey’d from the Brain to the *Ear*in this manner. But, supposing the Blond and Serum lodg’d in  
the Balls of the Cranium capable of corroding the Bottom of  
this Hole, and making a Passage to themselves thro’ it, yet  
still they could ooly enter the *Vestibulum* and *Cochlea* ; and he-  
fore they can pass into the *Tympanum,* they must corrode the  
Membrane which shuts up the *Fenestra Rotunda,* the Basis of  
the *Stapes,* and the Membrane with which it is cover’d; and  
even after they should happen to he lodg’d in the *Tympanum,*they would, without Doubt, he convey’d to the Mouth by  
means of the Eustachian Tube, rather than corrode the *Mem-  
brana Tympani,* and discharge themselves by the *Meatus Andi-  
torius-ί.* Upon my Hypothesis, I am involv’d in none of these  
Difficulties, and can easily account for these seemingly surprising  
Phenomena: For if a great deal of Serum is discharg’d from  
the Ears of Children, this is to he ascribed, nut only to **the**State and Condition of their Blond, which is aqueous and fe-  
rous, but also to the Relaxation of the Glands of the *Ear,*which is allo observ’d to happen to the GlandAof-the adjacent  
Parts : And if the Suppression of this Evacuation should throw  
Children into convulsive or eplleptic Fits, this Phenomenon is  
allo easily accounted for, since the suppressed Juices may reason-  
ably he suppos’d to become more acrid by their Continuance,  
and consequently occasion Irritations in the Membrane of the  
*Meatus,* and even enter the Mass of Blond again, and thus dis-  
charge themselves upon the Brain. As for those whose *Ears*discharge a clear and fetid Serum, ’tis to he obferv’d, that the\*  
the Glands of the *Ear,* when in them natural State, are only  
destin’d for the Secretion of the Wax, for the Purposes I have  
already mention’d; yet, in this Case, they may allo serve as  
a proper and commodious Drain for the Evacuation of **the**peccant Humours; which is evidently observ’d to be the Cafe in  
all the conglomerate Glands. And as for the Blond discharg’d  
from the *Ears* in Cases where the Head is wounded, ’tis suffi-  
ciently known, that it proceeds from a Rupture of the Vessels  
appointed for moistening the *Meatus.* ’Tis no herd Matter to  
conceive, how, by the violent Concussion of the Cranium,  
this Rupture should he produc'd in these Parts, as well as in the  
Brain: And, lastly, that the suppurated Matter, discharg’d  
from the *Ears,* has no manner of Communication with the  
Brain, is sufficiently plain from the following Observations.

Α certain Man of forty-five Years os Age, pretty corpulent,  
and of a sanguine Constitution, had labour’d under a plentiful  
Suppuration of both his *Ears,* but especially of the Right, for  
**the** Space of twenty-five Years, tho\* in every other respect  
the State of bis Health was very good. The Matter discharg’d  
was fetid, and considerably thick. And when this Evacuation  
was suppressed, he died of an Apoplexy within the Space of  
twenty-four Houts ; upon which I laid open his Cranium, and,  
viewing the Parts of the Brain near the OS Petrosum, I found  
them perfectiy found, and the Bone itself in its natural State;  
neither did I find any Collections of Serum in any Part what-  
ever, except in the Ventricles and Meanders of the Brain itself.  
Bin these Collections of Serum differ’d very much from that  
Matter, which, during his Life, had been discharg’d from his  
*Ears.* I have also disseised the *Ears of* several Children, rn  
whom I heve found the Tympanum filled with Pus ; whilst,  
at the seme time, I could never find any Indisposition or Dis-  
order, either in the Brain itself, or the Os Petrosum.

in curing Inflammations of the *Meatus Auditorius,* we must  
. he guided by the same Indications which are followed in all In-  
flammations of the external Parts. The Fluxion of Humours  
to the Parts affectiid is to he stopp’d by Venesections, and  
by anodyne Medicines, to which may he added Oil of  
Water-lilies, and the Juices of Lettice and Night-shade. But  
if the Inflammation continue, and tend to a Suppuration,  
we are then to apply maturating Medicines, fuch as Cata- .  
plains of the Crum of Bread, or Cataplastns made of hell’d

Gninns, Lily-toots, fresh Butter, and the Oil of Chamomile  
and Melllou

When the Abscefs is open’d, we must use detergent in.  
lections, made of Barley-water and Honey of Roses ; and, if .  
more powerful Medicines are necessary, we must heve recourse  
to Decoctions of Agrimony, Birthwort, and other vulnerary  
Plants, in White-wine, to which we may add a proper Quan-  
tity of Honey of Roses, or of Squills. If the Ulcer is fordid  
and putrid, we are to use Tinctirre of Aloes; extracted with Spirit  
of W ine ., if ’tis deep, the *Balsamum Viride Metense* is proper.

When the Ulcer is deterg’d, it must he dry’d and cacatriz’d.  
Decoctions of Plantain, Birthwort, and Galls, are excellent  
for anfwering these intentions ; the Wine of Pomgranates,  
described by *J. de Vigo,* is alfo excellently calculated for this  
Purpose. As these Medicines have nothing peculiar in them,  
and are used in Inflammations and Ulcers of all hinds, ’tis not  
necessary I should here account for their Effects, or explain the  
Manner in which they operate: I shall only add, that, during  
the Time we ufe them, we ought not to negleci general Reme-  
dies, which are highly proper in all the various Stages of these  
Disorders, in order to kill the Worms, some People drop  
bitter Liquors into the *Ear,* sirch as the Juices of Wormwoed,  
and the lesser Centaury, Deccedi on of the bitter Gourd, or **a**sew Drops of the Oil of hitter Almonds, or of Box; in the  
*Ephemerides Eruditerum, for* the Year I677, Spirit of Wine  
is affirm’d to he a most efficacious Remedy against Worms in-  
gender’d in the *Ear*; but of all the several Medicines recom-  
mended for this Purpose, .thofe which are somewhat thick, and  
ofan oily Nature, are the most efficacious, hecause they block up  
the Bronchia os the Insects, and suffocate them in a Moment.

As for the Discharges of serous Matter, which I have call’d Sup-  
purations, since, for the most part, they are not accompanied  
with Pain, and cannot he suppressed without bringing on a Train  
of very dangerous Symptoms, they are not, for this Reason, to **be**rashly and imprudently stopp’d; But, if at any time they should  
prove painful, we are to have recourfe to the Medicines I re-  
commended when .I was treating of the Pain *of* these Parts.

A third Disorder,- to which the *Meatus Auditorius* is subjecti '  
is an Obstruction, which is generally the Consequence of In-  
flammations, Abscessas and Ulcers, which usually swell thesis  
Parts ; but this Disorder may he also produc'd by other Causes.  
First, extraneous Bodies may flip into the *.Meatus,* such **as**Pease, Shet, or the Stones of some Emirs; and, when these  
Bodies happen to be lodg’d pretty deep, they are not easily ex-  
traded, because they are lodg’d in the Sony Part of the *Moatus,*which is very obllque, and declining towards the *Tympanum.*Besides, they are in some measure detain’d by the Congestion of  
Wax and Sordes in that Part. Pease, and all other Seeds, are  
extrafted with still greater Difficulty, since they not ooly  
distend themselves in the *Meatus,* bur may also heppen to ger.  
minate in it, as we may fee in Instances given by *Fabricius till..  
danus,* and *Schenkius.* The most common and ordinary Cause  
of the Obstruction of the *Meatus* is a Congestion and inspis-  
sation of the Wax. in these who negiech to cleanse theis *Ears,*this Wax is sometimes so largely accumulated, and in Process of  
Time so inspissated, as entirely to block up *the/Acatus.* In  
Men of cold and phlegmatic Constitutions, whose Juices are  
tough and viscid, this Wax may sometimes happen to he natu-  
rally very thick. The Cold also of the external Air may con-  
tribute not a little to the Production of the fame Effecti It is  
also probable, that this Wax may, on some Occasions, assume  
the Consistence and Hardness of a Stone; in which Case it  
produces an incurable Deafness. The Truth of this seems to be  
sufficiently prov’d by the near Resemblance and Analogy be-  
tween this Wax and the Bile, which frequently petrifies in the  
Gall-bladder : And this is farther confirm’d by the forty-fifth  
Observation of the first Volume of the Journals of *Bartholine,*who tolis us, that, aster bis Wife bad been long assiictsd with **a**Pain about one of her *Ears,* she dischara’d small Stones from  
the *Meatus Actditoreus,* along with the Wax, after which **the**Pain ceas’d. However, ’tis certain that this Wax is often  
found inspissated like Plaster, and in so large a Quantity, as  
entirely to block up both the bony and cartilaginous Parts of the  
*Meatus,* Instances of which I myself have seen in more **than**

*♦ yobus a Mesereu,* a celebrated surgeon in *Amsterdam,* in a Letter to *Barbet,* endeavours to strew the Manner in which Bloed is convey’d  
into the *Ears,* io Cases where the Head is wounded, in there words : .

. " As foon, say, be, as j bad observ’d a considerable Depression in the firperior Part of the Cranium, I found a large Masi of coagulated  
\*\* Bloed. a Part *of* which had been discharg’d thro’ the *Ears,* and another Part of it had elofed up the *Meatus Auditorius ;* upon which I was  
“ very desirous of discovering by what ways this Bloed had descended into the *Meatus Auditorjsss.* Whilst I was employ’d in this Research,  
“ I happily found the Reassin why, in this Place, the Pericr**anium** covers the temporal Mufcles, but not the Bone lying under them. Upon this,  
\*.\* I perceived the T ruth of what *Talpini* asserts, in his Answer to that Question, *Whence comes sbas Blood vubicb is often disc tars'si by she* Ears in  
*“ Wisaeis of tie Head? Pot* I myself have found, as *Tulpiue* asserted to me, that this Blood descended from the fuperior Part of rhe Head, be.  
“ tween the Craniumarid Pericranium, and fo enter’d the space between the *Os Parietale,* ana the *Os Petrejum*, and that from thence it was  
tl percolated, as it were, thro’ a Sierce, into the *Meatus Auditorius.* In this Diffedion I round the *GsPetrestm* remov’d at a great Distance  
" from the *Os Parietale ;* st, that in the Place where they had receded from each other, the Traces of their Motion might he observ’d beginning  
\*r at the *Os Petrafvm,* and easing in the o. *parietales* where a certain symphysis, indented in the *Os jugale,* and infernally callous, isob.  
“ serv’d to prevent the Attrition of the Parts, as in all other Articulations.”

" 4 It is observable, that many People have got a Trick of letting the Fume of Tobacco, taken in at the Metub. past out of the *Ears e*Hence iris certain, that, in **forne** subjects at least. Things may pass from **the** internal to **the** external *Ear,* without **a** Rapture of the *Mm.  
hr ana Tympani.*

ten or twelve Subjects, during the Time I apply'd myself to-**the** Dissection of the *Ear.* I heve also consulted with several  
fltilfnl Surgeons upon this Affair, who communicated to me  
shore than thirty Observations, proving that this Species of Deaf-  
ness is at once, the most common, and the most easily cur'd.  
And indeed, that celebrated Surgeon of *Mons,* who acquired  
such a Reputation for his Dexterity at curing Deafness, under-  
took the Cure of no Species of Deafness but this; and, that  
he might the hetter discover the immediate Cause of the Dis-  
order, he turn'd the Patient's *Ear* to the Rays of the Sun, and,  
when he perceiv'd any Obstruction in the *Meatus,* he made  
use Of a certain Instrument, proper for cleanfmg it; and by  
these simple Measures cur'd Vast Numbers of deaf People.

Certain Membranes are also sometimes form'd within **the***Meatus,* which shut it up entirely, and produce a particular  
Species of Deafness.. Ί have already said, that upon inquiring  
into the Causes of a Deafness with which a certain Person had  
fora long time been afflicted, I found in his Right *Ear, cis*which he was deaf, a pretty thick and lax Membrane, hefore  
which there was a Very Considerable Collection of SordeS, of the  
Consistence of Plaster, which was undoubtedly the Cause of  
his Deafness; for the *Membrana Tympani,* and all the other  
Parts of the *Ear,* were in their natural State and Condition.

The fungous and fleshy Excrescences, which sometimes sue- -  
ceed Ulcers of *Aspae Meatus,* or those Excoriations accidentally  
made in cleansing the *Ear* with too sharp an Instrument, may  
also rise to such a Height, as entirely to close it up.

. There is another Species of Obstruction incident to the *Meatus,*which happens when the adjacent Glands are tumesy'd, and  
drench’d with a superfluous Serum, just aS it happens in the fpon-  
gious Membranes of the Nose, which are sometimes so tumefy'd  
and distended, *2S* to intercept all Passage of the'external Ain.  
This Species.os Obstruction is always accompany'd with a Re-  
laxation of the *Membrana Tympani*; and for that Very Reason  
produces a Deafness, or at least a Difficulty of Hearing, which  
' is remov'd by the Evacuation *of this* superfluous Serum, either  
by the *Ear* itself, or by some Other Conveyance, in the same  
manner as m\* other Catarrhs.

In the first Species of Obstruction, the Whole of the Indica-  
tion consists in extracting the extraneous Bodies. But, to suc-  
**ceed** in this Attempt, we must carefully consider, whether these  
' extraneous Substances are capable of hecoming soft, such aS  
\* Pease; or whether they are hard and solid, such as Shot, and  
the Stones of some Fruits: We must alfo diligently observe,  
whether they are lodg'd in the cartilaginous, or in the bony Part  
**of** the *Meatus.* In order to extract soft Bodies lodg'd in the  
Cartilaginous Part of the *Meatus,* we must endeavour to break  
them; or the Ear-probe, or Spoon, is to he thrust heyond  
them; which may sometimes he easily done, in a pliant flexible  
Part, such as the Cartilage of the *Ear* is; and thus they are to  
he extracted from the *Meatus.* This Method may also be us’d  
with regard to hard Bodies lodg'd in the same Place, which may  
be extracted either with the Ear-probe, or the Terebra. AS  
for Bedies lodg'd in the bony Part of the *Meatus,* they are with  
great Difficulty extracted, as we havealready observ'd, especially  
when they fill the *Meatus* entirely up ; for, in this Case, we  
may easily perceive, that neither the Ear-probe, nor the Te-  
rebra, can he of great Service. In a Case of this Nature I  
therefore think, that an Incision may safely he made in the  
posterior and superior Part Of the. Far, fince there are no  
considerable Vesseis to forbid is, and fince, in that Part, the  
Duct is only *cover*d with a glandular Skim The Obliquity of  
the *Meatus* is, in fome measure, shunn’d by this Method, and  
we may use the Trerebra which is apply’d for extracting Bullets.  
If a Fruit-stone should happen to he lodg'd in the bony Part of  
the *Meatus,* fince by reason of its oval Figure it may he laid  
hold on by one of its Ends, we may in this Cafe make **use**Of an Instrument describ'd by *Hildanus, Cerat.* **I.** *Observat. An*winch he calls a *Tonacula,* and which, properly speaking, is no  
more than a double Ear-picker, or Spoon, made in form of a  
Pain of Tongs ; but for this Purpose the Branches of the Instru-  
ment must he Very flender, and made offineSteel. I need not, on  
this Occasion , deserihe all the minute Circumstances os these Ope-  
rations, nor warn the Operator to lubricate and relax the *Mea-  
tus* with Oil of sweet Almonds, since I take it for granted, that  
these Circumstances are already well enough known.

In the second Species of Obstruction, produc'd by the Indu-  
ration of the Wax, this Substance must be broken, and cleans'd  
out by means of Injections of warm Water, emollient De-  
coctions, Hydromel, Lintseed-oil mixed with a few Drops of  
the Spirit of Wine, Oil os bitter Almonds, and Oil of sweet  
Trefoil. Some, for this Purpose, use mineral Waters ; and this  
Intention is Very successfully answer'd by the Galls of all  
Animais in general. Others prefer warm Water to all other  
Liquors whatever, and add a few Drops of Spirit of. Wine to  
it, with a View to render it more penetrating.

The Wax is sometimes disengag’d and discharg’d within  
five Days, and sometimes not till after fifteen; which is an  
evident Reason, that we ought patiently to persist in the Use of  
injections, till the defin'd Effect be produc'd.

In the third Specres of Obstruction, in which there is Com- ‘  
monly a Congestion of Wax before the preternaturally-form'd '  
Membrane, we must first cleansc the *Mjatus* by means of the  
above-mention'd Injections, and afterwards perforate the Mem-  
brane itself; but, in this Operation, the Surgeon ought to rake  
particular Care not to injure the *Membrana Tympani.*

. In order to form a just Idea of the Method of Cure to be  
observ'd in the fourth Species of Obstruction, which is produc'd  
by shngous and fleshy Excrescences, littie more is requisite al-  
most, than to read the first Observation of the third Century of  
*Fabrioius Hildanus,* where he gives us a Description of a fun-  
gons and scirrhous Excrescence, winch appear'd in the *Meatus*after an Abscess. Before he attempted its Extirpation, he care-  
fully prepar'd the Patientis Body sor the Operation; after which  
he took as much of it off by the Ligature aS he possibly could ;  
but as the Root of the Excrescence was pretty deep, and as his ‘  
Instruments could not reach the Bottom os the *Meatus,* he was-  
oblig'd to use some Caustics, which he apply'd by means of a \*  
small lamina of Wax, for fear of wounding the *Meatus ;*which Method succeeded according to his Desire. But, **to**illustrate still farther the Method to he us'd tin the Cure of Dis-  
orders of this Nature, 'tis to he observ'd, that if tho fleshy Ex-  
crescence is Very large, and appears without the Entrance of  
the *Meatus,* we may in that Case cut ir off, either with the  
Scissors, or the Bistory ; or aS much os it as can he laid hold  
of, may he tied with a Thread ; but I should rather choose to  
cut it, because by that means more of it is taken off, than  
by tymg it. As we are afterwards oblig'd to stop the Blood,  
we for that Purpose use a small Piece of Vitriol, fix’d in **the**End os a Quill, in the manner os a marking Pencil, that **a**small Point os the Vitriol may only appear without the Extre-  
mity os the Quill, in order to touch only such Parts as stand  
in need os it, and stop the Blood by inducing an Eschar, which  
also carries off a small Portion os the Carnosity. In order **to**consume the. Remains os the .Carnosity, which are deep-lodged  
in the *Meatus,* as we must guard against wounding the Mem-  
brane by Caustics, os which the most common are Powder of  
Savin, burnt Alum, and red Precipitate, boiled with Wax and  
Turpentine, I would not make use of Laminae os Wax ; but  
I helieVe we may safely apply Caustics in the Form of an Oint-  
ment put upon the End os a Tent, and introduced into the  
*Meatus,* having fust passed in asmall Leather Tuhe made in the  
Form of the Finger of a Glove, through which it would be no  
hard matter to push the Tent with the Caustic Ointment on its  
Extremity, without any Danger of hurting the Membrane of  
the *Meatus.* Instead of the Leather Tube, a small one may  
he used, either of Brass or Silver, and bended so as to answer  
the several Windings of the *Meatus. After* the Eschar is form-  
ed, we must drop a little of the Oil of Eggs, or of Almonds,  
into the *Ear,* not only to ease and lubricate the *Meatus,* but  
also to procure a Separation of the Eschar. These Remedies  
must be repeated till the Whole os the Carnosity is consumed ;  
after which, we may make Tents, and arm them with the *Un.,  
guenturn rEgypiiacurn.* These Tents must be introduced and  
pushed heyond the Tube, that the Ointment may be applied to  
the Remains of the superfluous Flesh adhering to the Surface  
of the *Meatus,* where the Carnosity was, in order to prevent  
their sprouting out again, and with a View to procure a laud-  
able Suppuration ; aster which we must use detergent and leni-  
tive Medicines in order to incarn and cicatrize the Ulcer, al-  
ways remembering now-and-then to mix with them some  
Substance thet has a Tendency to prevent the Regeneration of  
fungous Flesh. A littie Vitriol dissolved in a sufficient Quan-  
tity os some Vuinerary and detersive Decoction, to give it a small  
A stringency, is Very proper sor this Purpose. This is to be in-  
jected into the *Ear,* and a littie Lint soaked in the same Li-  
quor introduced, which, when it can he easily done, proves of  
excellent Service, because it compresses the Ulcer, and prevents  
the Generation of anew Fungus.

In the fifth Species of Obstruction, which is caused by a  
Distension and Inflation of the Glands of the *Meatus,* we must  
prescrihe the same general Remedies as in all Rheums. The  
*Ear* is, in this Case, to he fumigated with the Vapour of  
Carduus Benedictus, or of the Decoctions of *Florentine* Orris,.  
Marjoram, Carduus Benedictus, Wormwood, Calamint,  
Baum, and Anise-seeds. - A Decoction of the bitter Gourd in  
Oil is Very much commended for this Purpose. *Barbet* uses  
a Decoction of Cloves in Red-wine, some Drops of winch are  
to he conveyed into the *Meatus,* which he afterwards shuts up  
with a Clove. *Plat crus* prescribes a particular Water for tins  
Purpose, the Efficacy of which he highly extols. *Mendererus*proposes another Water, which has been corrected by *’Lwelftr,*in his Notes on the *Pharmacopoeia Augustana*; and *Hadrianus  
a Mynsicbt* commends a certain compound Spirit of Wine, as  
very proper for answering this Intention. The expressed Juice  
of Marjoram alone is highly esteemed, as also Hares Urine,  
either alone, or mixed wish Spirit of Wine, or the Water os  
**the** common Ash-tree, and the *Hungary* Water. It also affords  
some Relief, to close up the *Ear* with Conon impregnated with  
MuIk. Some People think the Membrane of the *Meatus,* and

the *Membrana Tympani,* so delicate, and endowed with so ex- \_  
quisite a Power osSensation, that they will not admit oflnjections  
of acrid and spirituous Liquors. In this Case, a few Drops of  
these Liquors are only to he poured upon het Bread, winch is to

" he held upon the *Ear.* These Liquors are also with Success held  
in the Patient's Mouth; for their spirituous Parts, being ele-  
vated, ascend through the Eustachian Tube to the Eat. For the  
serie Reason, Masticatories are used with Success.

'Tis no hard Tash to account for the Action and Operation  
of these Medicines ; for, fince they are of a subtile and pene-  
trating Quality, they must of course open the Pores of the  
Glands, and promote the Discharge of the superfluous Serum.  
To all these I shall subjoin an Observation communicated to me  
by that skilful Surgeon Mr. *Passerat.*

A young Gentieman about eleven or twelve Years of Age,  
about the Beginnings of the Spring and Autumn, used some-  
times το have the Glands of the *Meatus Auditorius* so distended  
and swelled, that they touched each other, and it was impossi-  
ble to introduce any thing between them. At first Oil os Sweet  
Almonds was dropped into his Ear, in order to allay the Pain ;  
then a Decoction of Barley and Agrimony was used, which is  
of a detergent and drying Quality. By this means the *Ear,*after having discharged an apparently purulent Humidity for  
three or four Days, at last returned to its natural State.

I now come to consider the Disorders incident to the *Mem-  
brana Tympani,* which are Relaxation, too Violent Tension,  
Induration, and Rupture. The Relaxation is caused by a supere  
fluous Humour moistening this Membrane. This Symptom  
generally accompanies that Obstruction of the *Meatus,* which  
is produced by a Distension of the Glands, of which I have  
spoken already ; and it contributes Very much to a Dulness of  
Hearing in those Persons who are subject to catarrhous Defluxi-  
ons. 'Tis also for this Very Reason, that Southerly Winds, Fogs,  
and rainy Weather, impair the Sense of Hearing, as we find  
from daily Experience.

An extraordinary Tension of the *Membrana Tympani* pro-  
duces a quite different Effect, by causing the least Noises to he-  
come insupportable. This Tension happens in Violent Head-  
ache, and in acute Fevers, hecause the Tensions and Irritations  
of the Membranes os the Brain communicate themselves to all  
the neighbouring Membranes.

The Induration of the *Membrana Tympani* may proceed from  
its becoming too dry, which is sometimes the Case with old  
People. Besides, we know from numberless Observations,  
that the Membranes of the Body may not only become callous,  
hut also ossify. This I myself have particularly observed in **the***Dura Mater,* and in the Coats of some Arteries, which **I heve**often found ossified. This shews us, that the *Membrana Tym-  
pani* may sometimes become hard and cartilaginous, the **Conse-**.quence of which is an incurable Deafness.

Lastly, the *Membrana Tympani* may he broken either by  
some external Cause, such as an Ear-picker, *for Instance,* inad-  
vertentiy pushed too far, or by some strong Effort, such as is  
made when one shuts his Nostril and Mouth, and afterwards  
lets go the retained Breath with Violence, which happened to  
one of my Acquaintance. This Action of the Air is observed  
in Sneezing, when we feel, that the Air, which suddenly ascends'  
through the Duct, drives the *Membrana Tympani* outwards, and  
Occasions a painful Tension. This may also happen in CluinseyS,  
and in Difficulties of Breathing, where the Bottom of the  
Mouth and Nose are distended and inflated by any Defluxion of  
Humours, or an inflammation; for when the Air, thrust out of  
the Breast, cannot find a free Exit, it enters with such Vio-  
lence into the Duct which goes from the Palate to the *Ear,*that it' is capable of bursting the *Membrana Tympani. Tulpius*gives us two Very remarkable Instances os this in the thirty-fifth  
Observation of his first Book. It is not easy to explain hew  
the *Membrana Tympani,* which is *so* strongly inserted, as it  
were, in a Groove, should not be able to resist the Impulses of  
the Air.." But if we consider, that this Groove does not run  
quite round it, but ends at that Part which corresponds to the  
Entry of the *Meatus,* which penetrates into the Sinuses of **the**Mastoide Apophysis ; and that in that Part the *Membrana Tym-  
pani* only adheres simply to the Border of the bony Part of the  
*Meatus* ; we shall easily perceive, that it may Very readily he  
torn in this Place, and by that means afford a Passage for **the**Air to the external *Ear.*

By this we see how much *Tulpius* has heen mistaken, when  
he imagined, that the Duct winch goes from the *Ear* to the  
Palate, not only served to renew the Ain in the *Tympanum,* but  
also, on some Occasions, to afford a Passage for the Ain return-  
ing from the Lungs in Expiration; which Opinion he endeavours  
to confirm by the Observation concerning the two Asthmatic  
Cases already mentioned, and by the Authority of *Alcmeon,*who, according to *Aristotle,* imagined that certain Goats  
breathed through their *Ears.* Besides, the *Membrana Tympani*may he corroded by the Acrimony os the Pus retained in **the***Tympanum,* or in the *Meatus Auditorius,* as is plain from Num-  
hers of Instances brought by *Fabricius Hildauus, Schenkius,* and  
several other?, But, in whatever manner the *Membrana Tym-*

*pani* is broken,' the .Ain is discharged from that *Ear,* when **the**Mouth and Nostrils are shut, with such Violence as to extin-  
guish a Candle. In such Cases aS these, the Sense of Hearing  
remains for some time, but is gradually impaired, till at last it  
is quite lost ; from which we may infer, that the *Membrana  
Tympani* is not absolutely necessary for the Purposes of Hearing,  
but that its principal Use consists in transmitting its Vibrations  
to the Ain contained in the *Tympanum,* and to the small Bones  
employed in hearing, and in defending the Parts against the In-  
juries of the external Ain. When this Membrane is broken,  
the external Air alone is indeed able to put the small Bones,'  
and the immediate Organ of Hearing, into a Commotion, **and**thus excite the Sensation of Hearing ; but since is destroys **all**the Parts of the internal *Ear* by Cold, or imy Excess os its  
other Qualities, it at last destroys the Sense of Hearing.

in Cases where the *Membrana Tympani* is relaxed, we are  
to apply the same Remedies prescribed in other catarrhous Dis-  
orders ; but in Cases where ’tis too tense, hesides the Remedies  
prescribed in Diseases produced by Tension, we are to foment'  
the *Ear* with Milk, Oil of Sweet Almonds, or any emollient  
Decoction. Both the Induration and Rupture of the *Mem-  
brana Tympani* are incurable.

AS for the *Tympanum* and *Labyrinth,* as these Parts are bony,.  
and only covered with a single Membrane, I can scarce allow  
myself to think, that they are subject to any other Disorders  
than Caries os the Bones, and Inflammation of the Membranes.'  
Caries of the Bones sometimes happens after those Abscesses  
which open behind *the Ear.* In Cases of this Kind, Fistulas have  
heen observed above the *Mastoide Apophysis,* which heve pene-'  
trated its Sinuses, and made the littie Leaves, of which it is  
composed,- fall off in the Form of Scalis. This Caries Is at-  
tended with a Very nauseous Smell, and Very dreadful Sym-  
ptoms ; for the Caries sometimes penetrates into the Tympa-  
num by means of a Duct which leads to is, where, destroying  
all the Parts included in it, it produces Deafness; but this is  
rarely the Case, and I have never met with more than one or  
two Instances os it. AS for an inflammation of the Mem-,  
branes, when I applied myself to the Dissection of the *Ear,* I  
often sound the *Tympanum,* the *Vistibulum,* the semicircu-  
lar Ducts, and *Cochlea,* staffed with a thick Sanies, which might  
have come from Abscesses of the Membranes which line these  
Parts. I don't doubt but Deafness is Very often produced by.  
this Cause, as well aS by a Congestion of any other Matter in-  
all these Cavities; and that so much the rather, because this  
Matter, cannot easily he discharged from the *Tympanum,* fince  
its Cavity descends lower than the Opening of the Duct which,  
goes from the *Ear* to the Palate; and hence it happens, that  
these Humours cannot fall down into the Mouth, unless the ;  
Head be placed in a certain Situation. But, in order to make  
their Way through the *Meatus Auditorius,* they must corrode  
the *Membrana Tympani,* which they cannot do, till they have  
acquired a Very considerable Acrimony. We heve also Reason  
to suspect, that the Spiral Lamina may be corroded by the Acri-  
mony os the Pus, and also hecome relaxed or callous, as well  
as the *Membrana Tympani* ; but I will not positively affert, that  
this is the Case, fince I have no Instances of the Fact to justify  
the Assertion. . .

I cannot possibly recommend more efficacious Medicines for  
curing a Caries of the Bones of the *Ear,* then those prescribed  
by that ikilful Surgeon Mr. *Deymier,* from whom I hed this  
Observation. He first of all dilated the *Ear* with a prepared  
Sponge, which made a considerable Opening, *so* that the Me-  
dicines could by that means be applied immediately to the carious  
Bone. Then he applied Lint soaked in *Imperial IPatcr, in*which a littie Camplure had been dissolved. But as that Medicine  
incarn'd the lateral Parts of the Ulcer mo soon, whilst the Ca-  
ries as yet remained, he had recourse to the Powder of Euphor-  
bium, which produced Very happy Effects. Slight and momen-  
taneous burning Pains were indeed excited by it; but the Ap-  
plication of a Very small Quantity of it answered the Intention  
by procuring an exfoliation, and hindering the Flesh from  
sprouting out afresh. He also used the Tincture of Euphor-  
bium extracted with Spirit of Wine, adding to it some Myrrh  
and Aloes. The Cories being consumed, and an Exfoliation  
made, he used the *Impcrial Water* till the Cure was completed,  
applying to the Part affected Lint,sand the *Emplastrum de  
Betonica,* to which a littie of the Essence'os Juniper, Cloves,  
and the Oil of Marigold, had heen added.

in Inflammations of the *Tympanum* and *Labyrinth,* Topical  
Applications are scarcely os any Service; and we must only use  
internal and general Remedies, which are also attended with  
small Success, because the Abscesses open within the *Tympanum,*and the Cavities of the *Labyrinth*; whence, as I have already  
observed, the peccant Matter cannot be discharged ; so that  
Humours accumulated in these Cavities produce an incurable  
Deafness.

The Disorders incident to the *Auditory Nerve* are Obftruc-  
tion and Compression. When the whole Brain is overflowed and  
drenched with a sordid Serum, as in *Apoplexy* or *Pals.y,* 'tis  
plain this Nerve must he obstructed as well as the other Nerves,

Besides, the sole Obstruction of this Nerve, even when no  
other Fault is found in the other Organs of Hearing, may alfo  
produce Deafness, for the fame Reason that an Obstruction of  
the Optic Nerve occasions a-Gatth *Serena.* The Compression  
of the *Auditory Nerve* produces the fame Effect; and this Com-  
pression may be owing to several Causes; the Blood, for In-  
stance, or other Humours extravasated ; as also to Tumors, of  
which we have an Instance recorded in the fifty-third Observa-  
tion of the second Section of *Boneturs Anatomia practica,* who  
informs us, that *Drelincourt* found in the Brain of a Man, who  
died of an Apoplexy, a *Steatoma* between the Cerebrum and  
Cerebellum, which at first produced Blininess, then Deafness,  
and, last of all, a Privation of all the Animal Functions.

’Tis easy to discover this Obstruction or Compression in the  
*- Optic Nerve,* because all the Parts are transparent and diapha-  
nous ; and, when we diseover no Deiced in them, we have  
' Reason to suspedt an Obstruction of the *Optic Nerve.* But  
tiie internal Parts of the *Ear.* are not subjected to our Sight ;  
for which Reason ’tis very difficult to discern whether the Fault  
is in the Organ of Hearing, or in the *Nerve.* But if a Drowsi-  
ness or Palsy has preceded the Deafness, or if any of the rest  
of the Senses is also destroyed, we heve Reason to believe, that  
the Brain, and the *Auditory Nerve,* are either obstructed, or too  
strongly compressed, in this Case we are to use the same Me-  
dicines prescribed in *2. Palso,* as repeated Purges, Vomits, Ce-  
phalic Waters and Spirits, Sudorisics, Baths, Masticatories, and  
Sternutatories. Α Compression of the *Auditory Nerve,* pro-  
duced by a Tumor, is absolutely incurable.

The Disorders already explain’d either impair, or quite de-  
stroy, the Sense of Hearing; out what we call a *Tinnitus,* is a  
Depravation of it; and this Depravation consists in this, that  
the *Ear* perceives Sounds which have no Existence, or, at least,  
which are not produced by the Motion of the external Air ; fo  
that, being already silled with a certain Species of Sound, it  
cannot admit the Impressions of external Sounds, unless they  
are pretty strong and violent.

*1* he Antients imagined, that this Symptom was produced  
by the Motion and Agitation of the Air, which is lodged with-  
in the *Ear :* They also thought, that this Agitation was occa-  
sioned by Flatulencies and Vapours being conveyed to the *Ear.,*and that those Vapours arose either from the whole Body, as  
in Fevers; or from some particular Part, fuch as the Stomach  
’ or Brain , or from any pituitous Humours lodged in the Cavities  
of the *Ear.* They also attempted to account for all the several  
Differences of *Tinnituses* from the Quality, Consistence, and  
Motion of the Humours or Vapours conceded r within the  
Organs of Hearing. I shell not here make it my Business to  
point out the Weakness and Absurdity of1 this Theory, since  
these will sufficiently appear from the Account of a *Tinnitus,*which I am now to give. I shall only observe, that there is  
littie Probability, that all thefe disserentNoises, which People be-  
lieve they bear, should be caused, by something which in reality  
strikes the *Ear,* in order to produce the Sounds of Bells. for  
Instance, the Murmurs of Waters, and several other Noises,  
which People subjeci to a *Tinnitus* every Day seem to hear;  
and that ’sis probable, that most Part of these are false Noises,  
which may be produced in the *Ear* without either Wind or any  
other Matter striking the Membranes externally, as l shall now  
shew.

As I apprehend then, a *Tinnitus* consists in the Perception of  
a Sound which is not real, or, at least, of a Sound which is  
- within the *Ear.* in order to conceive how People may hear  
Sounds which do not really exist, we must observe, that as the  
Action of Hearing consists in the Agitation of the immediate  
Organ appointed for that Purpose, it is sufficient, that, in order  
to form a Sound, sijch Agitation be produced, whether it be  
produced by the Air or not; sor just as we conceive that Vision,  
which depends on the Manner in which the Retina is agitated  
by the visual Rays, may be performed without these Rays,  
when some other Caufes produce the same Agitation, as happens  
when the Eyes see Sparkles in the Dark, upon receiving any  
Blow ; fo we may also affirm, that when any other Cause,  
besides the agitated Air, produces in the Organ of Hearing, I  
mean within the Substance of the Membranes, this Agitation  
modified in the fame manner as it ordinarily is hy the Air,  
.. which conveys Sounds, the *Ear* appears to he struck with a  
Sound, which is not more real, than the Sparkles in the other  
Case are real Light. But what renders this Comparison siisti-  
ciently just is, that, as these false Appearances of Light, which  
are not caufed by external Objects, have nothing distinct and  
determinate, but only a simple Light, the circumstantiate View  
ofan Objeitdemanding a Concurrence of more Circumstances;  
so it happens, for the most part, that those Noises of the *Ear,*of which we are now speaking, are confused ; for the Hum-  
mings and *Tinnitus,* which in this Symptom arc the most distinct  
Nosses, are still very simple.

. In order to determine precisely whet may he the Caufe of this  
Agitation in the immediate Organ of Hearing, we need only  
examine the Disorders in which a *Tinnitus* occurs, and these  
arc inflammations and Abscesses of the *Tympanum* and *Laby-*

*rinth,* and the Disorders of the *Meatus Auditorius.* Insianima-  
irons of the *Tympanum* and *Labyrinth* necessarily produce Agi-  
rations in the *Spiral Lamina,* and in-the *semicircular Ducts,*either by the Tension of the Membranes, or by the Vapours  
which transpire, and mix themselves with the Air in the *Tympa-  
num,* acrid Substances, Worms, extraneous Bossies, a Con-  
striction of the *Meatus* succeeding a Distention of the Glands,  
and in general every thing which can cause, in the *Meatus Auo  
ditorius.* Pain, and the other Symptoms I have mentioned, agi-  
tate the Membrane of the *Meatus,* and the *Membrana Tym-  
pani* and this Agitation is able to communicate itself to the  
immediate Organ of Hearing.

The second Species of *Tinnitus* is, when one perceives a  
true Noise, hut formed within the *Ear* itself Thus we hear  
a humming Noise when we stop our *Ears.* This Noise is pro-  
duced by the Friction of the Hand, or by the Compression  
which influences the Skin and Cartilages, whose Parts, heing  
put into a Commotion, may produce an Agitation there. The  
Elasticity of the Ar, and the Vapours which continually ex-  
hale from Bodies, may also contribute' to this Effeci, when  
those flowing from the Hand, joined to those proceeding from  
the Membrane of the *Meatus,* being pent up, strike rhe Sides  
of this Cavity, and produce Agitations, which, though very  
small, yet form a real Sound, which becomes sensible by rea-  
fon of the Proximity and Continuity of the Parts, as also by  
means of the Reflexions which are made in this Cavity wheri  
blocked up.

Commotions of the Cranium, and Disorders which contracti  
the *Meatus,* may also produce there Species of *Tinnitus,* if we  
suppose, that all the Shocks the Cranium receives, are com-  
municated to the immediate Organ of Hearing, by means of  
the Continuity alone of rhe Temporal Bone , but this ought  
to be restrained to the Time in which the Agitation hapu  
pens ; for those *Tinnituses* which assiich the Patient afterwards,  
must be accounted sot from a Disorder of the Spirits, as vie  
shall afterwards see. In like manner, the Distensior, of the in-  
ternal Membrane cf the *Meatus,* by rendering it narrower,  
may produce a like Effect with that of the Hand which shuts  
up the Ear. Besides, it frequently happens, that People feel a  
Pulsation within the *Ear,* which makes them imagine, that  
they bear- something striking; and this Pulsation is sometimes  
so strong, that other People may' also hear it. A Gentlewoman  
of *Picardy* afforded me an Instance of this, who, upon the least  
violent Exercise, seels so troublesome aPulsation in her *Ear,* that  
she imagines a Pendulum to be tied to her Head; and this Pul- .  
fation is also heard by those who come near her. Now this  
Puliation is undoubtedly produced by a dilatcd Artery, because  
it always keeps perfect Time with the Pulsation of theHeart*; and*this Perception cf an interior Sound to me seems perfectly anas  
logons to that Symptom observed in imperfect Cataracts. Per-  
sons who labour under this Disorder, see Motes and Flies  
dancing before the Objects they look at, and these Metes and  
Flics are no other than the thick and viscid Partiolcs beginning  
to be accumulated in the aqueous Humour, which by their Mo-  
tion agitate the Retina, and necessarily produce a certain Sen-  
ia tion. But it may be objected; If there are true Sounds, and  
if the Organ of Hearing distinguishes them as they really are  
in themfelves, why should they be ranked among the Species of  
*Tinnituses ?* I answer. That, in reality, thefe Sounds are per-,  
ceived such as they are; but the Seofe of Hearing is depraved,  
so far as it ascribes these Noises to some external Oj of ; just  
as those in whom a Cataraft begins to forni itself, attribute the  
Motes and Flies to external Oijects, and stretch out their  
Hands to catch them.

Besides, I am of Opinion, that there may be a Perception of  
a false Noise, without any Fault in the Organs of Hearing;  
which happens when the Parts of the Brain where the Filaments  
of the Auditory Nerve terminate, are agitated in the same man-  
ner they use to be by Objects. Whet induces me to helreve this,  
is my observing, that many Disorders of the Brain, fuch as  
Deliriums, Phrensies, and Vertigos, are acxompanied with a  
*Tinnitus* ; and that those who are subject to epileptic and faint--  
ing Fits, bear humming Noises, which are, as it were, .he'  
unwelcome Harbingers of the Paroxysm. As in all these Dis-  
orders there is an irregular and tumultuous Motion of the Spi-  
rits, is is much more eafy to conceive, that the agitated Spirits  
may put the Extremities of the Auditory Nerve into Ccmmo-  
tions, and by that means excite a Sensation of Noise, than to  
fuppofe any Fault or Defest in the Organs of Hearing. This  
Method of accounting for a *Tinnitus* to me appears sufficient-  
ly satisfactory and just ς and I think I may say, that as the  
Monon of the Spirits is very irregular and tumultuous in these  
Disorders, fo the Sounds and *Tinnitus* we hear, when labour-  
ing under them, must be very different from the Sounds we  
hear on other Occasions. I shall undoubtedly be toJd,That this  
is an Error of the Imagination, and not an Affection of the  
*Ear.* I agree to it , for ’tis the very thing for which I contend.  
As ’tis thought we can never hear any tiling without the *Ear*being struck, vie ascribe all Sounds to that Organ. But’tis a  
matter of Indifference, whether the Fibres of the Nerve oeagi-

rated *in the Brain, or in the Ear,* since in both Cases the same  
Sensation will be produced. This happens in a manner anala-  
gous to that in which a *Vertigo* is produced; in which 'tis oh-  
vinus, that the circular Motion of the Spirits produces the same  
effect as the Objects seen would do, if they were actually in a  
gyratory Motion ; or aS it happens to phrenetic Patients, who  
imagine, that they see Motes, which have no real Existence; and  
this Symptom is only occasioned by the Agitation of the *Optic  
Nerve* within the Brain. Thus as we ascribe the Symptoms of  
Cataracts and PhrensieS to a depraved imagination, we must also  
afcribe to the same Origin those *Tinnituses,* which succeed the  
Disorders of the *Ear,* which Very often by no means depend  
on the Indispositions of the Organs of Hearing.

On this Hypothesis we may establish two Species of *Tinni-  
tuses,* one of which is produced by the Disorders of the Brain,  
and the other by those os the *Ear.* Those produced by the  
Disorders *of* the *Ear,* as has been already said, are either true or  
salse ; and, of these last, some are called *Tinnituses,* some *hums,  
suing Noises,* some *Tonglings,* and others *Murmurs.* And in  
general we may affirm, that dull and heavy Noises are produced  
by a languid Agitation, and sharp tingling Noifes by a brisk  
and lively Agitation, which is sufficiently confirmed by the re-  
mote Causes of these Symptoms. Rheums, for Instance, and  
Suppurations, where the Membranes are relaxed, generally pro-  
duce a heavy, dull Noise ; whereas Inflammations, and Palos  
os the *Ear,* where the Parts are generally tense and dry, pro-  
duce *Tinnituses,* and acute Sounds. We have Reason to believe,  
that all these Noises make the same impression on the *Spiral  
Lamina,* and *semicircular. Ducts,* that acute and grave Sounds  
would do.

The Cure of a *Tinnitus,* in general, is to be managed accord.,  
ing to the Diseases os the Brain, or *Ear,* which have produced  
it. I add, that in *Tinnituses,* or sharp Noises, we must use  
almost the same Remedies as in acute Pains, and Tensions of  
the *Membrana Tympani*; and that, in humming heavy Noises,  
we may use those prescribed against that Pain which is produced  
by Cold, and against a catarrhous Obstruction; after which it  
will be no great Difficulty to chuse the most proper, if we only  
have a due Regard to all the several Circumstances, from winch  
just indications may be taken. *Du Ferney.*

**DISORDERS** *of the* **EARS.** *From* **CELSUS.**

Next to the Eyes, Nature has assign'd the most useful Office  
os Lise to the *Ears :* But Disorders in these latter are the more  
dangerous; for the Diseases of the Eyes are confin'd to the Parts  
affected, but inflammations and Pains of the *Ears* precipitate  
the Patient sometimes into Madness, and Death itself Where-  
fore we ought to be more careful to apply a Remedy in the  
Beginning, in order to prevent a greater Danger.

As soon, therefore, aS a Person seeis a Pain in ins *Ear,* let  
him betake himself to Abstinence and Resh On the next Day,  
if the Disorder be increased, his Head is to he shaved, and1anointed with *Unguentum Irinum* hot, and then be cover'd.  
But a great Pain, with a Fever and Want os Sleep, requires  
also Phlebotomy. Is this be, for some Reasons, judged improper,  
the Belly is to be evacuated. Hot Cataplasms of Fenugreek, Lin-  
seed, or some other mealy Substance boiled in Mulsum, no w-and-  
then changed, have a good Effect. Sponges also wrung out of  
hot Water, and apply’d at Intervals, are of Service. The Pain  
being mitigated, a Cerate made of *Unguentum Icenum,* or *Cy-  
prinum,* is to be put round the Ear ; sometimes whet is made  
of Oil of Roses proves effectual. If the Vchemence *os* the  
Inflammation wholly deprives the Patient of Sleep, half the  
Quantity of bruised Poppy-headS is to be added to the Cata-  
plasm, and these are to be boil'd together in *Pajsurn,* or *Mul.  
sum.*

There ought also to be dropp’d into the *Ear* some Medi-  
cine, which is always to be warm'd, and is most conveniently  
instill'd by a *Strigil* .. When the *Ear* is sufficiently full, some  
fine Wool is to be put over it, to keep in the Liquor. So much  
is to be done in general.

Particular Medicines are. Rose-water, the Juice of the  
Roots of Reeds, Oil in which Earth-worms have been boiled.  
Juice of bitter Almonds, or of Peach-kerneis. . Compound  
Remedies sor mitigating the Pain and inflammation, common-  
ly used, are. Castor and Opium bruised together, in equal  
Quantities, and then mix'd with Paffum; or equal Quantities  
of Opium, Saffron, and Myrrh, thus bruised together, and  
moisten'd at Intervals with Instillations, sometimes of Oil of  
Roses, sometimes os Passitm, or the bitter Part of the *Egyptian*Bean; bruised and mix'd with Oil of Roses ; to which some  
add a littie Myrrh, or Opium, or Frankincense, withWoman's  
Milk, or the Juice of bitter Almonds, with Oil of Roses.

*Of* **PUS,** *and the ill Smell of the* **EARS.**

If the *Ears* have .Pus in them, it will he proper to instil Ly-  
*eiiem* alone, or *Unguentum Irinum,* or the Juice os Leeks with  
Honey, or the Juice os Centaury with *Pastum,* ΟΓ the juice of  
a Pomgranate warm'd in its Shell, with the Addition os a little  
Myrrh. The following also is a good Medicine.

ι

Take of that sort of Myrrh Call'd *Stacte,* and Saffron, each  
one Dram two Grains and a half; bitter Almonds, twenty-  
five; Honey, half a Quarter of a Pint: Pound them toge-  
ther, and, when you use them, let them be warm'd in  
the Shell of a Pomgranate.

These Medicines also which are good for an ulcerated Mouth,  
are effectual for Ulcers in the *Ears* but if they are old, and  
abound with Sanies, or cornIpt Matter, the following Remedy,  
invented by *Erasistratus, ssszJ* Very fitiy be used: It consists  
Of

Pepper, Saffron, each one Dram two Grains and a half;  
Myrrh, Misy boiled *seoctumst,* each two Drams five  
Grains ; burnt Copper, two Drams five Grains : Bruise  
them in Wine, and, when they are dry, add thereto a  
Pint and a half of Paffum, and boil them all together. It  
is to be used with an Addition of Wine and Honey.

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*Menophilurs* Remedy is also very effectual in this Case : It  
consists of

Long Pepper, one Dram two Grains and a half; Castor,  
two Drams five Grains; Myrrh, Saffron, Opium, *Syrian*Nard, Frankincense, Malicorium, the Inside of the *Egyp-  
tian* Bean, bitter Almonds, the best Honey, each sour  
Drams ten Grains. While you are bruifing them, add  
thereto some of the strongest Vinegar, till the Whole  
becomes of the Consistence of *Paffum.*

If there he much Pus, with an 31 Smell,

Take of Verdegrise, Frankincense, each two Drams five  
Grains; of Honey, one Sixth os a Pint; of Vinegar, one  
Third of a Pint: Boil them all together, and use them  
withat. Addition of sweet Wine. The Juice of Henbane  
also is, of itself. Very effectual in this Case.

A common and approved Remedy for all Disorders of the  
*Ears,* is the following, which was composed by *Asclepiades*

Take of Cinnamon, Cassis, each one Dram two Grains and  
a half; the Flowers of the round Juncus, Castor, white  
and long Pepper, Amomum, Myrobalans, each two Scru-  
ples ; Male Frankincense, *Syrian* Nard,' sat Myrrh, Saf-  
fron, Spuma Nitri, each two Drams five Grains : Bruise  
them first separately, then mix them, and bruise them  
Over again in Vinegar, and so put it by for Use. When  
you have Occasion to use them, dilute them with Vine-  
gar.

If the Ear run with Sanies, and there be a Tumor, it will  
not be improper to syringe the *Ear* with mix'd Wine, and '  
afterwards to instil some austere Wine mix'd with Oil of Roses,  
to which a little Spodium may be added.; or instil Lycium with  
Milk, or the Juice of- the *Herba Sanguinalis* with Rose-water,  
or the Juice of a Pomgranate with a littie Myrrh.

*Of a* **SORDID ULCER** *of the* **EARS.**

If the Ulcers he sordid or foal, it is best to wash them well  
with Mulsum, and then use some or other of the Remedies  
hesore prescribed, mix'd with Honey. If PuS run the more,  
the Head is to he shaved, and wash'd with Plenty of hot Wa-  
ter, which is also to be gargled : The Patient must walk till  
he he tired, and he sparing in his Diet. If a bloody Matter  
issue from the Ulcer, Lycium with Milk is to be infused into  
the *Ear*; or Water boiled with Roses, and mik'd with the  
Juice of the *Hirba Sanguinalis,* or *Acacia.*

If Flesh be grown over the Ulcers, and the same be of an  
ill Smell, and Blond issues from it, it must be well wash'd with  
warm Water; after which a Decoction of Frankincense, .Ver-  
degrise. Vinegar, and Honey, or a Decoction of Verdegrise and  
Honey, is to be infused into the *Ear*; or Squama yEris, beaten  
up with Sandarach, are to be instill'd into the fame through a  
Pipe»

*Of* **WORMS** *in the* **EARS.**

Worms bred in the *Ears,,* if they lie near enough, are to  
be drawn out with an Ear-prohe *t if* they are too remote, you  
are to destroy them with Medicines, and be careful to prevent  
their future Breeding. White Hellebore, bruised in Vinegar, is  
effectual to both these Purposes. The *Ear* also is to be rinsed  
with a Decoction of Horehound in Wine, which will cause the'  
dead Worms to Aide towards the exterior Parts of the *Ear,*when they may Very easily be taken out.

*For an* **OBSTRUCTION** *in the* **AUDITORY PASSAGE.**

If the Auditory Passage he stuffed, and a thick Sanies lies  
within the Cavity, some of the best Honey is to he put into the  
Ear : If this has but little Effect, you must add to half aQuar-

ter of a Pint of Honey, two Drams five Grains of Verdegrife,  
and hell them together for Use. Iris, with Honey, is effectual  
for the same Purpose, or two Scruples of Honey and Rose-  
water : Or,

Take of Galbanum, two Drams five Grains; Myrrh, Ho-  
ney, and Bullis Gall, each two Drams five Ora ins. Wine  
enough to dilute the Myrrh. .,

*For* Thickness of **HEARING.**

If a Thickness of Hearing come upon a Person, which corn-  
monly happens after an inveterate Head-ach, the Ear is, first  
of all, to be examin’d -, for either a Crust, such as grows over  
Ulcers, or a Collection of Sordes, will appear in View. If  
there he a Crust, fome hot Oil, or Honey and Verdegrife, or  
Juice of Leeks, or Mulsum with a little Nitre, must be pour’d  
into the *Ear:* When the Crust is loosen’d, the *Ear* is to he  
rinsed with warm Water, which may render the mollify5 d and  
separated Matter more easy to be extrafled hy the Ear-probe.  
If there he Sordes, and those of a foft Kind, they are to be  
extracted with the same Probe ; if they are hard, Vinegar with  
a little Nitre is to be injected, and the mollify’d Matter is to  
be extracted, and the *Ear* cleansed as hefore. If there remains  
a Heaviness of the Head, it is to be shaved, and rubhid gently,  
but for a long time, and anointed, with Oil of Iris, or of Bay,  
a hide Vinegar being mix’d with either of these Oils. Then  
the Patient is to walk for a long while together, and, after  
Unction, the Head is to be gently fomented with warm Water.  
The Food must he very low, and Aliments of a middle Nature  
only are to bo taken, and Drink much diluted: Gargarisms are  
sometimes to be used. Injections also are to he made into the  
*Ear,* of Castor with Vinegar, and Oil of Bay, and the Juice  
of the Rinds of Radishes, or of wild Cucumbers, adding that  
of Rofe-leaves bruised. The Juice os unripe Grapes, instill’d  
with Oil of Roses, is good also against Deafness.

*Of a* **NOISE** *in the FARS.*

There is another Kind of Disorder, when the *Ears* sound  
within themselves ., whence assent comes to pass, thet they are  
difcbled from receiving external Sounds. The Disorder is  
slightest, when it proceeds from a Cold; worse, when it is caofed  
by a Diseafe, or an inveterate Head-ach ; hut worst of all, when  
it takes its Rife from the Approach, of some great Disease, and  
especially the Epilepfy.

It the Distemper proceeds .from a Cold, the *Ear* must he  
cleansed ; and the Patient must hold his Breath, till some Hu.  
moiir froth out of his *Ears.* If a Difease, or Head-ach, he the  
Cause, the same Directions, as to Exercise, Friction, Perfu-  
sion, and Gargarizauon, are to be observed as in the preceding  
Disorders; and the Patient must keep to an extenuating Diet.  
The Juice of Radish, with Oil of Roses, or with the Juice of  
wild Cucumber-roots, or Castor in Vinegar and Oil of Bay,  
are to he injected into the *Ear.* White Hellebore, bruised in  
Vinegar, and afterwards infused in. boil’d Honey, and made  
into a Collyrium, is to be put into the *Ears.* If the Disorder  
be owing to none .of these Causes, but terrifies the Patient with  
an Expectation of something worse, Castor with Vinegar, or  
withOll of Iris or Bay, is to be put into the Ear; or Castor,  
mixed with Oil of Bay, and Juice of bitter Almonds; or Myrrh  
and Nitre, with Vinegar and Oil of Roses. But in this Case  
also there is more to be expected from a Regimen of Diet, in  
which the same Advice is to be follow’d, only -with greater  
Strictness, as was given hefore; with this Addition, that as  
long as the Ringing in the *Ears* continues, the Patient must  
wholly abstain from Wine.

If the Noise be attended with an Inflammation, the *Ear*must be abundantly mollify’d with Oil of Bays, or Oil of hit-  
ter Almonds, with which some InixCastor, or Myrrh.

*HaW to extract Things fallen into the* **EARS.**

Things sometimes happen to fall into the *Ear,* such as little  
Pebbles, or Animals. If a Flea he got into it, a little Wool is  
to be stuffed into the Cavity,' into which the Animal may get,  
and *fo* he taken out. If the Flea does nor follow, or it he  
another Animal, take a Probe wrapt in Wool, and, dipping it  
in fome very glutinous Resin, particularly of Turpentine, in-  
troduce it into the Ear, and turn it about ; by which means you  
will certainly take hold of'.the Creature, and sopull itjout If  
there he any thing dead, it must he.extractsd with the Ear-probe,  
or a blunt Hook, a.little bene If thefe fail, it may be drawn  
out with Resin, in the same manner as the other. Sternutato-  
ries also are a convenient means to force it out, or *an Ear-  
clyster (Oricularia Clystere),* the Water heing forcibly impell’d  
into the Ear.

A Board also is sometimes placed in such a manner, as to he  
supported at each Extremity, and the Patient is bound upon this  
Board, with theaffectsd *Ear* towards it, so as the *Ear* does not  
reach beyond the Board; then that Extremity of the Board,  
next the Patient's Feet, is to he struck with a Hammer, and

**what was in the** *Ear* **sillls out hy the Concussion.** *Celsas,  
Lib. 6. Cast.* **7. τ**

**DIsoRDEas** *of the External***EAR.**

Sometimes there happens a Fracture of the Cartilage of the  
*Ear,* in which Case, before Pus is sound, a conglutinating  
Medicine is to be apply’d ; for it often prevents a Suppuration,  
and confirms the *Ear. -* Now, we ought not to he ignorant,  
with regard to the prefent Subject as well as the Nose, that the  
Cartilage itself is not conglutioated, but the Flesh about it in-  
creases, and the Place is consolidated ; therefore if the Skin be  
broken, with the Cartilage, it is sow’d up on both Sides ; but  
I now speak os a Fraiture where the Skin remains entire, lin  
this Cafe, if Pus be already generated, the Skin must be open’d  
in another Part, and the Cartilage against it be cut out, making  
a Wound in Form of a Crescent *(Lunata Plaga*) ; after which  
some gentle Styptic must be apply’d to stop the Blood, fuch as  
Lycium dipt in Water. This done, let a Linen Cloth with a  
Plaister be laid on the Place, avoiding all fat Things ; and hehind  
the *Ear* let sine Wool be apply’d, sufficient io fill the Vacuity  
between that and the Head; After this, the Wound is to be  
gently bound up, and on the third Day fomented with a Va-’  
pour-bath. Abstinence is as necessary, in the Beginning, in this  
aS well as other Cases, till the Inflammation ceases. *Celsos,  
Lib.* 8. Cap. 6.

*For a* **CoNTUsIoN** *of the* **EARS;**

*Hippocrates* advises to let it alone ., but, since we are often  
compell’d by the Patients themselves to do something,

Take of Myrrh, Aloes, Frankincense, Acacia, os each an  
. equal Quantity; and, mixing them with Vinegar, or the ..

White of an Egg, anoint the Pam Or,

Take the Inside of a hot Loaf, and bruise it in a Mortar  
with Honey, and so apply it." Or,

Take os Bitumen, Frankincense, Aloes, the Flesh of Housed  
. snails, *African* Bulhi, of each an equal Quantity ; bruise  
them in Vinegar, and so use them.

If an Inflammation arise, apply a Catapisfm of Sesamum,  
or Alica, boil’d in Vinegar. Let the Cataplasms he hist thin,  
and not bound on, or but very flightly; and put Wool, moi-  
sten’d with Oil, into the Hollow of the *Ear. P. Asginet,  
Lib.* 3. *Cap.* 23.

**WoUNDs** *of the External EAR.*

Wounds of the *external Ear* are either to he united and  
consolidated by means of agglutinating Pleisters ; or, in Cases,  
where the Cartilage is quite cut asunder, by the Assistance of  
proper Suture, taking care at the same rime to dress the Part  
affedted with Lint, soak’d in forne vulnerary Balsam, and to  
secure the Dressing by proper Bolsters and Bandage. In Wounds  
of the *Ear,* happening near the *Meatus Auditorius,* we are to  
take partioular Care, that no Blood, or other Matter, be al-  
low’d to enter it, since, by that means, the Membrane of the  
*Tympanum* could not fail to be injured. In order, then, to pre-  
vent this Inconvenience, we ought always, on Occasions of  
this Nature, carefully to guard the internal *Ear* by means of  
Lint, or Cotton, put into it. *Hiister. lastitut. Chirurg.*

*Of an* **IMFERF0RATI0N of the AUDITORY PASSAGE.**

This Defech is from the Birth, the Passage of Hearing being  
stopp’d by a Membrane, which sometimes appears on the Super-  
ficies, sometimes is deeply seated. It may alfo happen aster the  
Birth, from a preceding Ulceration of the Parts about the Pas-  
sage, by which means Flesh grows over it, and,stops is up.

If the obstructing Membrane be deeply situated,, the Under-  
taking is difficultwe ought, however, to attempt theCuttiog  
it by fome stnall Instrument: If it lie on the Superficies, we  
are to cut it with a sharp Knife, and, if it be necessary, fake  
it quite off. If Flesh be grown over the Passage, it must also  
be taken off with the Knife that is made for cutting out a Pte-  
rygium or Polypus : Afterwards we take a Linen Tent, of a  
*Size* adapted to the Passage, and, moistening it with Water,  
roll it in Chalcitis powdered, or some other Powder of that  
Kind, and thrust it into the Cavity, in order to prevent the  
Growth of new Flesh. If there he an Inflammation, we ima  
mediately withdraw it ; if Blood issue from the Passage, we  
apply a Sponge dipp’d in cold Water, and use other proper  
Means. *P. Acginet. Lib.* 6: *Cap.* 23.

Some Children have the Misfortune to be brought into the  
World with the Auditory Passage closed up, and obstnsoled by  
means of a certain preternatural Coat, which is sometimes  
thicker, and sometimes thinner ; sometimes discover'd as soon  
as they are born, and at other nines not to he perceived, rd],  
the Children growing op, a Privation of Speech too palpably  
betrays it; for Deafness, and an incapacity of uttering articu-  
late Sounds, are venerallv insenarable Attendants upon each

other. For this Reason, when we sind, thet a Child does not  
begin to speak at the Age in which other Children usually do,  
we are to take a very' minute and careful Survey of his Tongue  
.and Ears; Tor it frequently happens, that some Fault lies  
latent in the inner *Ear, by means of* which the natural Capa-  
city of Hearing is prevented and destroy’d ; and this Defect is  
removed with more or less Difficulty, in proportion as it is  
, seated deep and remote in the *Ear,* or near its Entrance: For  
when the very Entrance of the Passage is closed up by means of  
a certain.Coat, the Cure is foon brought about; but when this  
Coat lies deeper, the Cure is less certain, and more difficult;  
because in the last-mention’d Cafe, in cur Attempts to cut or  
remove the preternatural Coat, the Membrane of the *Tympa-  
num,* which lies immediately behind it, is generally wounded  
along with it. in Cafes where a preternatural Membrane closes  
up the very Entrance of the Passage, ’tis proper to make a cru-  
cial Incision into it, and prevent its Reunion, by means of **a**Tent kept in it as long as the Circumstances of the Cafe seem  
to require. By this Method the deaf Patient, if free from  
every other Defeci, will, in all Probability, receive his Sense  
of Hearing, together with its natural Consequence, a Capacity  
of Speech. If, on the contrary, this superfluous and preter-  
natural Membrane should happen to lie so deep, as to be contigu-  
ous to the Membrane of the *Tympanum,* the Cure, as I have  
already fain, is generally doubtful and uncertain. But because,  
in mis Cafe, little, or rather no R ellef at all, is to be expected  
without an Operation, it seems far more adviseable, on some  
Occasions, to attempt a Cure, tho’ it should prove unsuccess-  
ful, than to fuffer the Patient to remain without any Assistance,  
and abandon him to Dcspair. And when the Operation is un-  
dertaken, mis superfluous and preternatural Coat is to be cut,  
either longitudinally or traofversty, as rhe Circumstances of the  
Cafe require ; but the Operator ought to have an exaol and  
steady Hand, lest with the Point of his Incision-knife he should  
wound, or even quite pierce through, the Membrane of the  
*Tympanum,* which, in the Ears of Children, does not lie very  
deep.'

*Of* **ExTRANEous** Substances *in the* **AUDITORY PAS-  
SAGE.**

. Not only small Pebbles, but Glass, Beans, and Camb-stones,  
may fall into the Ears. As for Glass and Pebbles, they remain  
in their proper Bigness ; but Beans, and Carob-stones, and  
. other things of that Nature, by imbibing the natural Humidity

of the Body, fwell, and occasion very great Pain.

Your only way then is, to take them out, either with the  
Ear-probe Hook, or Forceps, or to get them out by violent  
Concussion, placing the Ear upon a fort of Circle. I have  
osten extracted such things, as well as Water- fallen into the  
Ears, by Suction with a Reed, putting Wax about the End of  
the Reed next the Ear, in order to exclude the Air. For Peb-  
bles, and fuch Matters, I got them out by putting forne Wool  
about a Probe; and after sinearing it with Resin of Turpentine,  
or some other glutinous Substance, gently introducing it into  
the Chanel of the Ear. If this Way does not succeed, give a  
Sternutatory, and stop the Mouth and Nostrils; hut if this also  
he inesseolual, we must have recourse to Surgery, before an In-  
flammation or Convulsions come on, or the Case be dangerous.

Placing therefore the Patient upon the opposite Ear, we  
make a small lunar Section at the Basis of the Ear; behind the  
Part called the Lobe, and with the Hollow of the Probe take  
out the offensive Matter; we then sow up the Wound, and  
perfect the Cure with Vuineraries. *P. Acginet. Lib.* 6.  
*-Cap.* 24.

*In what Manner preternatural Substances lodged in the* **EARS,***and Things that have casually sullen into them, are to be  
extracted.*

The Wax of the *Ear,* which was originally designed for  
excellent Purposes, is sometimes preternaturally indurated ., and  
sometimes extraneous Substances, stich as a Pea, a Bean, a  
small Stone, a Cherry-stone, an Animal of a small Size, or  
other Things of a like Nature, fall accidentally into the Audi-  
tory Passage. Now two very important Reasons concur to  
render a cautious and expeditious Extraction of such Substances  
highly proper and necessary : The one is, that the Patient may  
be speedily freed from those Pains, which, in Cases of this Na-  
ture, are sometimes very violent: The other is, that he may  
not be deprived of his Seofe of Hearing.

Which of the above-mention’d Substances is lodged in **the***Ear, rosy* be 1 earn’d not only from the Relation of the Patient  
himfelf, but also by an Inspection of the *Ear,* or by introducing

’ proper Instruments, or Probes, for that Purpose. In Cases  
where the Wax, being preternaturally indurated and dry’d,  
either renders the Hearing dull, or destroys it altogether, the  
most proper and efficacious Method which can he taken, is to  
drop a little of **the Oll** of Olives, or Almonds, or even a little  
warm Milk, into rhe affectsd *Ear* j ordering the Patient at the  
fame time to recline his Head the opposite Way. A sew Mis

nutes after this, we must introduce a proper Ear-prohe, and  
with it draw out the offending Matter by Hide and little. And  
if it should happen, that the Wax is herder than to admit of  
being soften’d, and extracts! by taking these Measures once,  
-they are to be repeated in the fame manner again and again,  
-till stich time as the obstructing Matter is entirely remov’d.  
But if a small Stone, or Cherry-stone, is lodged in the *Ear,*the Passage ought carefully to he lubricated, by dropping a little  
tepid Milk or Oil into it; aster which a proper Ear-probe, or  
fuch aForceps as is represented by Letter E in *Tab. o/i.* is to be  
introduced, and the offending Substance extracted with the  
utmost Caution and Delicacy. . If a Pea, a Bean, or any other  
Substance of a like Nature, should happen to he lodged in the  
*Ear, and* become turgid, by means of the Humours and Moi-  
sture which surround it, our most expeditious Method of Relief,  
if it can neither be extradited by the Probe nor Forceps, is to  
introduce a very finall Knife, with which we must divide the  
tumefied Body with all possible Caution, and then extra# the  
several Parts of it one after another.

Sometimes very finall Animals, or Insects, are also lodged in  
the Ear, and excite a very troublesome Titillation or Itching,  
and sometimes very acute Pains, by their Efforts to disentangle  
themselves from the Wax in which they stick, in this Case, is  
the Animal or insect can he discovered by the Eye, it is to be  
forthwith extraoled by the Probe or Forceps. But if it cannot  
possibly he seen, the most safe and commodious Method we can  
take is, to drop feme Oll of Almonds or Olives, or even some  
tepid Spirit of Wine, into the Patient’s Ear; and to order him  
to recline bis Head to the opposite Side, that the Liquor may he  
retained, till we think the Animal or Infest is killed ; for by  
the above-mentioned Substances all Animalcules or Insects what-  
ever are very speedily destroy’d. Then the Liquor dropt into  
the Ear is to be discharged, and the Passage to be carefully  
cleansed, by means of a Probe armed with Lint or Cotton.  
Some Physicians in this Case order bitter Liquors, such as the  
Decoction of Wormwood, or of Colocynthis, to be dropp’d  
into the Ear, because these Substances also generally kill Ani-  
malcules or Infects. But in my Opinion Olls, and Spirit of  
Wine, ate, on these Occasions, preferable to any other Lin  
quors whatever, since fome Species of Animalcules are so far  
from being kill’d by bitter Substances, thet they rather delight  
in them, whereas no Species of Instil can be found, to which  
Olls, and Spirit of Wine, do not prove mortal.

*Of* **TUBERCLES** *form'd in the* **MEATUS AUDIToRIUs.**

’Tis no uncommon Thing for Tubercles, or certain Ex-  
crefcences of Flesh, to arise in the auditory Passage, which not  
only prove very uneafy to the Patient, but also do a considerable  
injury to the Sense of Hearing. Is this Disorder is recent, the  
Tubercles, or superfluous Flesh, may, for the most part, he  
destroy’d by the Use of corroding Medicines : But we must, in  
this Cafe, take care, that the deeper and more internal Part of the  
Passage he sufficiently guarded, and clos’d up with Lint orCotton ;  
lest, in Consequence of a Negieci of this kind, any Part of the  
corroding Application should reach the Membrane of the *Tym-  
panum,* and prove injurious to it: For which Reafon it feenis  
generally rnostadvifeable to ufe a Knife, or the Scissars, for ex-  
rirpatiog Tubercles of this kind, especially when they do not lie  
deep and remote in the Passage. But when a Protuherance of  
this Nature lies more conceal’d, and at a greater Distance from  
the external Orifice of the Passage, we must ufe final! Hooks,  
and a proper Forceps, for drawing it towards us, and then extir-  
pate it as essectsally and *safely* as we possibly can; after which,  
\*tis proper to apply the Lapis Infernalis, again and again, to the  
remaining Roots of the Tubercle, still we have, by little and  
little, Io thoroughly extirpated them, as to leave but Imai! Pro-  
bability of the Tubercle’S rising afresh. If corrosive Medicines  
do not answer the Intention, and if the Tubercle does not lie  
too deep and remote, a proper aolual Cautery may sometimes be  
usd with Success, And, lastly, that Ligatures maysie properly  
and commodioufly us’d in the Extirpation and Cure of Tubercles  
of this kind, is abundantly plain, from the Cases describ’d and  
illustrated with Figures in *Hildanus, Cent. %. Oof.* I. and in  
the *Chirurgia* of *Purmannus, p.* 280.

For the Metbnd of burning the *Ear,* in order to cure **the**Tooth-ache fee **ODoNTALGIA. ;**

*Of* **ACOUSTIC** *Instruments, such as are intended to affest tar***HEARING.**

As the Sight is assisted by Spectacles, or other Glasses con-  
triv’d for that Purpofe, so the Hearing is sometimes enliven’d,  
and render’d quick, by means of proper Instruments, which we  
call *Acoustics.* Tho’ these are of very various Figures, and for  
the most part bear some Resemblance to a Trumpet; yet I have  
generally found, that those were most commodious, and best an-  
swer’d the End, which were like a kind of Pipe, a little bend-  
ed, narrow at the Beginning, but diverging and growing wider,  
like a Trumpet, at the other Extremity, such as that repre-  
sented in Tab. 40. Fig. a. Those allo 'drfcnb d by *Nack* and

*Dechhers,* and represented in Tab. 4O. by Fig. 3. arid I. are  
highly recommended. The two first of these Instruments, re-  
presented by Fig. 2. and-3. are uS'd,.by introducing the (lender  
Part, A,i into the Ear, And holding them in that Position by  
the Handles, Βῖ. 'The third of these.instruments, exhibited  
in Tab. 40. FIg. 4. heing Very .small, and wreath'd up in form  
os aspiral -Shell, - is, by *Dechhrs, in Excrcetat. Practices,* re-  
coininended as the most commodious of all others; because, in.  
consequence of its Smallness, it may be so conceal'd under one's  
Hair, or a Wig, as scarce to be observable; whilst the slender  
Part, represented by A, is introduc’d into the *Ear,* and the  
Chords represented by Β B carried round the Ear, in order  
Io secure it. But, aster the most accurate Observation, I  
have found, from Experience, that the two last-mention'd of  
these instruments are not so contriv'd, as to. answer the  
Intention so well aS the first *of* these Instruments, represented  
by. Fig. 2. which, besides the Advantage of its Simplicity, I  
heve always found to be inore useful, in Cases of this Nature,  
than the other two. Some Years ago there was a public Re-  
port, that one *Touches, -* a *French* Monk and Mathematician,  
who, ..for he singular Excellence Of his Genius, was created  
a Member of the Royal Academy of *Paris,* had, in that City,  
contriv'd a certain acoustic Instrument, which was not only so  
small as that it might-he conceal'd within the *Ear,* without  
projecting in the least, but also so exquisitely adapted to the In-  
tention, aS to prove surprisingly beneficial to the Hearing. But  
what sort of Instrument this may he, or whether its Use is at-  
tended with such uncommon Advantages, are Circumstances of  
which I have not yet gut sufficient Information ; tho' I have  
not only diligentiy inquir'd aster these Particulars, os some Ger-  
*man* Physicians *os* my Acquaintance, who resided for .some  
time *at Paris,* but also endeavour’d Io get Satisfaction in this  
Point, by writing Letters to some Surgeons and PhysicianSOf  
*Paris.* It were, however, to he wish'd, that Men of a. me-  
ohanical Turn were more solicitous and industrious in contriving  
an instrument of this kind, since it could not sail to he of sin-  
gular Use and Advantage to Numbers of their Fellow-creatures.  
SorneYears ago *Reufner,* a Physician of *Silasta,* in *Ephem. Nat.  
Cur. Cent. ζ. Obs.* 6. recommended the Use of a certain Pipe,  
made of gilded Silver, and about a Span in Length, in a Disti-  
oulty of Hearing, aS also in Pains and ringing Noises ofthe  
*Ears.* He order'd this Pipe to he introduc'd into the affected  
*Ear,* twice or thrice every Day; and asserted, that, by Suction,  
the pernicious Air, which, he suppos'd, prov’d injurious to the  
*Ear,* and excited the ahove-mention'd Disorders, might be ex-  
hausted. But as 'tis very much to be doubted, whether this  
pernicious Air is the Couse of these DiforderS of the *Ears, so*neither heve I been able to discover, why this Pipe should he  
made of Silver, rather than any other Metal, why it should he  
gilt, or what its particular Form or Size should he, since he  
has not describ'd it. - In the mean time, 'till better and more  
commodious Instruments for assisting the Hearing are found  
out, I must, from my own Experience, recommend that simple  
Instrument, almost of the Shape of a Hora, made either of  
Brass or Silver, and represented by Fig. 2. as the most useful  
and efficacious in Disorders of this kind.

*The Method of boring the* **LOBES** *of the* **EARS. .'**

The Method of boring the Lobes of the Ears is thus : First  
of all, the Place to he pierced, which ought to he the Middle  
**ofthe** Lohe, is to he mark'd with Inks' Then, taking the Ex-  
tremity of the Lohe in one Hand, and a common Steel Needle,  
of a pretty large Size, in the other, you are to perforate the  
Middle of the Lohe, in the Very Part mark'd. Then you are  
to pass thro' the Perforation a Thread, or round Piece of Lead,  
such aS that represented Tab. 4O. Fig. 7. This must he bended  
into the Form of a Ring, which, for some succeeding Days,  
- must he anointed twice or thrice a Day with Oil of Eggs, or  
St. John's-wort, and now-and-then gently mov'd backwards  
and forwards, 'till the Lips of the Perforation are indurated,  
and healed. But, in. performing this Operation, 'tis advise-  
. able to perforate a littie higher than the Middle or inferior Parts  
**of the Lohe ; lest,** by the Leaden Ear-rings, or Filaments,  
**its** Extremity should be dilacerated. But, for performing this  
Operation with the greater Accuracy and Expedition, some of  
the later Physicians have invented an instrument for this very  
Purpose, winch is represented Tab. 4Ot Fig. 5. Between the  
**two** Plates of tins Machine, the *Ear* is plac'd, in such a Posi-  
tion, that the Hole, Β, shall exhibit to the View the Part of  
the *Ear* mark'd for Perforation. Then the Ring, A, is to be  
drawn so sar up, as to six and secure the Lohe sufficiently.  
Then, by means of a Steel, a Golden, .or a Silver Needle,  
**either** of the common Form, or, which is hetter, by one hol-  
**low** atone of its Extremities, such as that represented in Fig. **6.  
A** B, .the Lohe itself is so perforated, that the leaden Filament,  
represented by Fig. 7. which is inserted within the hollow  
Part of the Needle, may be left in the Perforation by way  
**of** Ear-ring; winch, as I .have already said, must he gently  
mowd backwards and forwards, till the Lips of the Per-  
foration are heal'd.. **Bur, instead of this Needle, I think we**

may still more eonimodiousty use that represented by Figi th  
which, at its Obtuse Extremity, is divided like a Larding-pin,  
that it may the better retain and transmit the Leaden Filament,  
which is to he introduc'd into the Division, after half of **the**Needle is pasted thro' the Lohe. But tho' Perforation of the  
*Ears* is generally perform'd, rather with a View to gratify tho  
Fain Sex with the additional Ornaments of Ear-rings, than for  
any medicinal Purposes ; yet, if we may believe *Riverius, Obs.  
Medic. loo.* and some other Physicians, it is so noble and  
effectual a Remedy against some Disorders, that none can possibly  
exceed it: For, *lens Riverius,* if a triangular red-hot Needle is  
passed thro' the Lohe of the Ear; and if, aS in a Seton, a  
Cord of Linen or Silk is introduc'd into the Perforation, in  
order to keep it open, by drawing it backwards and forwards ;  
'tis scarce credible what a large Quantity of noxious Humours  
shall be deriv'd To the Part, and discharg'd, or how successfully  
the most terrible Disorders of the Eyes, the Teeth, and eVen  
the Breast itself, may he cur'd, and the Danger Of a Consump-  
tion carry'd off by this means. So that 'tis no wonder if some  
os our modern Physicians, especially such as are employ'd in  
Curing Disorders os the Eyes, have begun by degrees to intro-  
duce the Perforation of the *Ears* into Practice. *M. A. Seve\*  
rimes [Libo de Esific. Medics]* also asserts, with *Paracelsus,* that  
this Operation is peculiarly advantageous in a beginning Deaf-  
ness. *Heister. Institute Chirurg. .*

*Explication of the* Figures *exhibited in* Tab. 19. *relative la  
the Organ of* HEARING. *From,* Du Verneys

*Fig.* I. Represents the temporal Bone as large again as it  
naturally is, with its squamose Parts cut off, and its long Canal-  
as much abraded as is necessary to give a sain and open View of  
the *Membrana Tympani. ' z*

. A exhibits a fore Prospect *of* the *Membrana Tympani* in its  
natural Situation. .. . - .

B the-Manubriumof the Malleus apply'd behind this Mem.»  
brane.

**C** the long Branch of the Incus which appears thro’ this  
Membrane, though 'tis situated at a small Distance from it.

**D** the Head of the Malleus.

E the solid Part of the Incus, with its short Branch.

F these discover'd by this Dissection of the adjacent  
Parts..

**G** the bony Canal half abraded.

H the Mastoide Apophysis.

I the Styloide Apophysis.

K the external Muscle of the Malleus in its natural Situation\*  
L a prick'd Line denoting the stender Apophysis of the *Mal-  
leus,* in which this Muscle is inserted.

*Fig.* 2. Exhibits a lateral Prospect of the *Membrana Tympani,*that its Inclination may be the better observed.

*Fig.* 3. Exhibits the same Prospect of the *Membrana Tym-  
pani* inserted in the Extremity of the bony Canal. It also re-  
presents the Manner in which that Side of the bony Canal,  
winch is nearest the Face, lies distant at its lower Extremity  
from the *Membrana Tympani,* and how it insensibly approaches  
to it in proportion aS it ascends. A, A, A, that Side of **the**bony Canal which lies nearest the Face.

*Fig.* 4. Exhibits a lateral View of the Incus and Stapes in  
their natural Situation.

A represents the solid Part *os the* Incus.

B its short Branch, of which, in this Disposition Of the Parts,  
we have a fore Prospect.

**C** its long Branch. . .

**D** the Head of the Stapes join'd to the long Branch of the  
Incus, by means of the fourth small Bone.

Erg. 5. Represents the Rostrum or Beak of the long Branch  
of the Incus, the fourth small Bone, and the Head os the Sta-  
pes with its Cavity; but all four times as large as their natural  
Bulk.

A the Rostrum of the long Branch of the incus.

**B** the fourth small Bone.

**C** the Head of the *Stapes* with its Cavity.

*Fig.* 6. Represents the *Stapes* five times as large as its **natural**Bulk.

A the Head of the *Stapes.*

Β its Neck.

**C C** its Branches sulcated.

**. D** its Basis.

**Ε** the Membrane of the *Stapes.*

*Fig. J.* Represents the Basis of the *Stapes* in the same Situa-  
tion, in order to shew, that it is also sulcated.

**D** the Basis of the *Stapes..*

*Fig.* 8. Represents the *Stapes* with its Muscle in their natu\*  
ral Situation.

’ A *rhe Stapes.*

B its Muscle; But heth aS large again as their natural Balk.

***Fig.*** 9\* Represents the small Bones in the Situation, inwinch  
they are seen, when the Eye is apply'd to the Duct, which **pe-**netrates into the Mastoide Apophysis.

A the solid Part of the Incus. . ..

Β a fore View of its short Branch.

**. C** its long Branch.

D a posterior View of the Manubrium of the Malleus.

E represents the superior Part of the Stapes. .

***- Fig. to.*** Represents the small Bones in their natural Situa-  
tion, as they are seen on the opposite Side when the Eye is ap-  
ply'd to the Duct which goes from the Ear to the Mouth.

A the Head of the Malleus, which conceals the solid Part  
of the Incus, and its short Branch.

B the Manubrium of the Malleus.

**C** the long Branch of the Incus.

D a side View of the Stapes. In this Representation of the  
small Bones, a small Rod is across, in order to shew what is  
superior, and whet inferior, according to the Various Views and  
Prospects.

***Fig.*** II. Exhibits a posterior View of the temporal Bone as  
much abraded as is necessary, to expose ***sbCMembrana Tympani***to the Sight. Upon which Membrane are discover’d the ***Mal.  
lens*** and ***Incus*** in their posterior and anterior Views, together  
with that small nervous Branch call’d the ***Chorda Tympani,*** aS  
also the Tendon os the external Muscle of the Malleus, all in  
these natural Situation : As also the Cavity which receives-the  
Head os the Malleus ; and the solid Part of the Incus.

. A a posterior Prospect of the squamose Part of the Tempo-  
ral Bone.

. B the Mastoide Apophysis exhibited in the same Situation;.

C C the OS Petrosum abraded.

D the Membrana Tympani.

Ε the Malleus.

F-the ***Incus,*** whose short Branch lies upon the Entrance of  
the ***Meatus,*** winch penetrates into the Sinuses Of the Mastoide  
Apophysis. . . .

G the Foramen of the Auditory Nerve.

***i.*** the Tendon os the external MuscleOf the Malleus.

2, 3. the ***Chorda Tympani. -***

***. Fig.*** I2. Represents the half of a Head, less by a third than  
the natural Bulk, with the whole superior Part of the Cranium

\* taken away, and the remaining Part cut perpendicularly thro’  
. the Middle of the Nose, that the Orifice of the Duct coming  
from the Ear to the Palate may be discover'd.

. A A the Cavity of the Nose, with its Laminae.

B the Bottom of the Palate.

C the Orifice of the Duct coming from the Ear no the  
Palate,

I. its cartilaginous Side, which forms a Border resembling  
a Crescent.

D the Wind-pipe cut thro’ the Middle.

***Fig.*** I 3. Represents the Temporal Bone as large again as  
. its natural Bulk, and prepar’d in such a manner as to expose to  
View the ***Cochlea, and semicircular. Ducts,*** in., their natural

Situation.

A the Arch of the Vestibulum.

' Β the ***Fenestra Qvalis,*** mark'd by a prick'd Line.

**' C** the ***Fenestra Rotunda*** open.

D the ***Spiral Lamina,*** mark'd by a prick'd line; separate  
from the spiral Canal which covers it; and from the Mem-  
\* brane by which it adheres to the Surface of that Canal.

i, 2, 3. the three semicircular Ducts in their natural Situa-  
tion. I. the.Superior. 2. that in the Middle. 3. the Infe-  
rior. That in the Middle, and the Inferior, are open, in or-  
der to shew, that they are hollow.

ι ***Fig.*** 14. Represents the Covering of the ***Cochlea*** taken off,  
and view'd internally, in order to discover the ***Spiral, Semioval  
Canair - . -***

***- N. B.*** This is also represented ***Tab.*** 9. ***Fig.*** 2.,

***Fig.*** I 5. Represents the ***Cochlea*** several times larger than-the  
natural Bulk, and view'd-according to its Heighth. In order to  
view, it in this Situation, the anterior Part of its Covering is  
only raised by a perpendicular Section, which shews in what  
manner the ***Lamina*** makes two Circumvolutions. and an half  
round the Spindle ; in what manner it adheres to the Surface  
of the Canal, which serves instead of.a Vault to it; and lastly,  
. in whet manner the Sides of this Canal, adhering to the,Spindle,  
become as small and flender as the ***Lamina,*** itself.

. Ache inferior. Portion of the ***Vistibulum,*** which did not na-  
turally belong to this Figure, but was left in order to shew in  
what manner the spinal Lamina comes out of its Cavity, and  
passes before the ***Fenestra Rotunda.***

B the Fenestra Rotunda shut up .by a Membrane as flender  
as the ***Membrana Tympani.***

i, 2, 3. the two Turns and an half made ***bJAhCfpiralDa-***rtina roUnd.the Spindle,

**4, *ζ, 6.* the two Turns arid an half made by the spiral  
Duct.**

***Fig.*** 16. Represents the spiral Lamina suspended in the Air,  
and several times larger than its natural Bulk, together with the  
Membrane by which it adheres to the Surface of the Canal, ..

I, 2, 3. the se/rtfZ ***Lamina*** itself. . ... 2

4, 5, O. the Membrane which adheres to it, and which ad-  
pears to he separated from’it by an intermediateDine. si

***Fig. τη.*** Represents the Spindle several times larger than its  
natural Bulk ; upon which we may observe the Traces of **the**Circumvolutions of the***fpiral Lamina,*** and ***spiral Duct.'***

I, 2, 3. the Traces ***of*** the Circumvolutions of the ***fpiral  
Lamina,*** which are pierc'd with several small Holes, which give  
Passage to the Filaments of the auditory Nerve. :. u. -r

4, 5, 6. the Traces made by the Edges of the spiral Ducti

***Fig.*** 18. Represents, the in an erect Position, with

one half cut off by a perpendicular Section, almost as in ***Fig.*** 3l  
except that in this the Bone is more abraded:- This Figure is  
only designed for the Illustration and better understanding the  
third Figure. It is sufficient to observe, that in this the Lami-  
na appears separated from the Surface of the Duct, that- the in-  
terior Part of this Duct may appear the more conspicuoufly,  
and that we may see more, distinctly in what manner its Sides  
are lengthen’d out in order to be join’d to the Spindle.

***- Fig.*** I9. Represents the ***Vistibulum*** and ***rhe three semicircular  
Ducts*** open, in order to discover the Distribution of theirVefielsi  
***a*** the arterial Branch, which enters the ***Vistibulum.***

***b*** a small Branch ofthis -Artery, which’'pastes thro' the com-  
mon Entrance os the ***Veflibtdum,*** and distributes itself to the  
superior and inferior ***Duffs. - \* :***

***c*** the Branch winch distributes itseif oyer the ***middle Duct.***

***Pig*** go. Represents the Arteries of the ***Cochlea, Vestibulum,***and three ***semicircular Ducts.***

A the ***Fenestra Rotunda. ....?-***

B the Aperture of the ***Duct*** affording ^ Passage for the Vess  
seis; this is at the Entry os the inferior Winding of the \_ ***Co-  
chlea.*** It appears, that one Part of these Veffeis is distributed  
to all the ***Cochlea,*** and another to the ***Vistibulum,*** and three  
***semicircular Ducts,***.which; last are represented aS suspended in  
the Ain» / - \

***Fig.TA.*** Represents a Portion of***C.aetFostilndumgintsd*** the **three  
*semicircularDucts,*** suspended in the Air, in order to shew their  
natural Situation, and. their Orifices.

A the inferior Portion ofche ***Vistibulum.***

B the superior ***Duct, ’sc"***

C the-inferior. - - ’ ’

: D chat in the Middle. ss"

la the Orifice of tho superior ***semicircular Duct.***

2. the first Orifice of themiddle Duct. \ . .. . a  
. 3s the Orifice of the inferior Duct.

An the other Orifice of the middle Duct

5. the-common Orifice of the superior and' inferior Ducts.'

6. the first Aperture, which affords a Passage to one of the  
Branches of the ***sese Portion*** of the ***auditory Nerve. ,***. 7. the second Aperture, which affords a Passage tex another  
Branch of the same ***Nerve.. - - . .***

- ' ' - - .... am\*

***Fig.*** 22. Represents the ***Vistibulum*** in the fame Situation &  
mine former Figure, vriththeNerves of the three ***semicircular  
Ducts,*** suspended in the Ain. -

***a a.*** Branch of a Nerve which, enters ***tistaiVestibulant*** by **the**Opening mark’d 6 in ***Fig. six.*** It divides itself into three  
Branches, Of which the first, enters the Orifice of the superior  
***semicircular Canal,*** the second the superior Orifice of the ***mid-  
dle Canal,*** and the third, which is tho smallest, descends- to'  
enter the common Orifice.

***b*** the Branch, which enters the Opening- mark'd: 7: ***m-Fig.*** 22.  
and which is. divided into two Branches, the inferior of: which  
enters.the Orifice of the inferior ***Duct.,*** and the other advances  
into .the.common Orifice, and unites itself to the third Branch  
mark'd ***a..*** These Nerves, ane. here represented somewhat  
larger than thein natural. Size. 4

AURIS MARINA. A Shell-fish, very common' on the  
Coasts of ***GuernseyusidNarmandy,*** and those of ***Scotland.,*** It has  
hut.one Shell which defends it. from injuries, and is much in  
the Shape.of an Ear.. It adheres to the Rocks like a LimpinL

This Fish.isnot eaten.raw, but the People of the Country  
where, it is sound usually heil, and then fry it.. They are  
esteemed to make a good. Fricassee. It is, likealhother Shell.-  
fish, art .al calescent hoed. It is called the ***Aurntar.*** It- tastes  
somewhat like the Burs Os Veal, but not quite so tender.. The  
Shell on the Margin din perforated'with five-or six'small regular  
Holes ; and on the Inside resembles Mother of Pearl. ...

AURISCALPIUM,, from ***Auris,*** an Ear, and ***scalpo* to**scratch. An Ear-picker, an Instrument. to take Wax, or any  
**other extraneous-Bedy, out of the Rars,**

- AURORA CONSURGENS,- A whimsical Phrase of the  
Alchymists, by winch they would express the Vegetation os  
their Gold. \_

AURUM, Ossic. Fahr. I.- Schrod. 36I. Worm. II4.  
Charlt. Fossi 45. Aldrov. Mus. Metal. 37. Mer. Pin. 2c8.  
Schw. 367.; Cale. Musi 436. . Kentm. 58. *Aurum, SOL*Mont. Exon GOLD. . ° . \*

*Gold, Aurum in Latin,* χρυσός in *Greet,* So/ by the Chy-  
mista, is the most noble, most perfect,, and heaviest of all MeA  
tais ; ductile, sonorous, and of a reddish-yellow Colour. It  
is sometimes sound pure and unmixed in the Earth, in Rivers,  
and in the Clefts and Fissures of. Stones, either in Dust, or  
larger Pieces. The Ores from which *Gold* is extracted by  
Tire, are sometimes a kind of Pyrites, os an ash or purple  
Colour. It is often sound with Orpiment, and is likewise  
sometimes hid in the Mines of other Metals, especially of Sih.  
ver, from which it must be separated by various Contrivances.  
There are many. Rivers,, among the. Sands of which *Goldin*found in small Grains, and there are Targe Gojrf Minesin *Nor-  
way, Hungary,:ntid Guinea* ;, but the richest arc in *Peru* and  
*Mexico, . . ...... - ..., . ’*

*- Gold* is the heaviest of all Metals, and of all known Bodies;  
bur withal so soft and ductile, that It may he extended so aS to  
have its Surface, increased to. 652,500 times. In all common  
Fires, it remains fixed ; and, even when exposed in the Focus  
of the greatest Burning-glass, it suffers that Heat for a great  
while, hesore it begins to evaporate. It never contracts Rust,  
and is dissoluble in Aqua Regia. It is capable of being pene-  
trated by Mercury, and its Texture so her opened, as Io he  
turned into a soft Amalgama. It may be calcin'd by common  
Sulphur, if set. on Fine and flaming. When dissolved by Aqua  
Regis, it may by Oil osTartar per Deliquium, be precipitated  
into a blackish Powder, winch being gentiy heated, either by  
Fire or by Attrition,, flies off into the Air with a great Noise;  
whence it has. the. Name of *Aurum Fulminans.* The same Ef-  
fect will happen by Gfing Spirit of Sal Ammoniac, or any other  
urinous Spirit, instead of Oil of Tartar; butthen the Falmi-  
nation requires a greater Degree, of Fire.

. The Analysis or Resolution .of this Metal has been hitherto  
attempted without:any Success. The.Sulphur and Earth seem  
to be so strictly, united in it, as. not to be separable by the  
common Powers of Fine ; and in the Focus of the greatest  
Burning-glass, intire Parcels of it fly off, without any apparent  
Resolution into its Principles. .00.... .

. .The Use of *Gold* .in Physic was unknown to the antient  
*Greeks.* The *Arabians* first talked of its Medicinal Virtues,  
and mixed it in their Compositions, heing previously reduced  
to thin Leaves, upon a Persuasion, that st comforted the Hears,  
and exhilarated the Spirits ; and that therefore it was proper in  
Palpitations of the Heart, and in Melancholies. The Chymists  
add farther, that a most powerful fixed Sulphur is contained  
*in Gold,* which, isit he mixed with the Bloed, preserves it from all  
Corruption, and restores and revivifies human Nature inythe fame  
manner as the Sun, the great . Original of this Sulphur, en-  
livens all Nature. Many Authors are of a quite different Opi-  
Ilion, hecause the Effects os *Gold* are found not to answer thefe  
great Pretensions ; and it may he reasonably question'd, whe-  
ther *Gold* he at all useful in Physic. LeafGo/ά is an Ingre-  
dient in the *Confectio Alkermis Regia,* .the *Confectio de Hyacin-  
tho, Pulvis Diamargarita Frigidus, Pulvis Laetificans,* and  
*Pulvis Pannonicus,* all of *Charas.* It is likewise used to gild  
Filis and Boluses. - .

The Virtues of the Chymical Preparations of *Gold* are equally  
dubious, because they seem to derive their Energy, not from  
**the** *Gold,* but from the Menstrua, and other Substances mixed  
with it. Whence we may conclude, that the most Valuable  
**and** most precious of all Metals is the most useless in Physic,  
except when consider'd as an Antidote to Poverty.

- The Tincture of *Gold,* or *Aurum Potabile,* made in this  
manner, is this :

. Take of pure *Gold,* half a Dram ; os *Aqua Regia,* two  
Ounces : Make a Solution, and pour upon it of the  
. . limpid essential Oil of Rosemary, an Ounce. Shake  
the Mixture well, and the Spirit of Salt will subside, de-

. PriVed of its yellow Colour , which is retained in the Oil  
that swims at the Top. Separate this Oil from the Spirit  
hy Inclination. Mix it with four or five Drams of Spirit  
os Wine highly rectify'd ; digest them for a .Month, and  
**the** Mixture will acquire a purple Colour. This Tincture

. is Diaphoretic and Sudorific, and is recommended in  
. malignant Fevers, The Dose is from three to fifteen

Drops.

But, after all, this is not a genuine Tincture of *Gold, he-*ing only the *Gold* divided into Very, small Parts, by the Spicula»  
os the Aqua Regin, swimming in the Oil os Rosemary ;  
.neither do we know any radical Tincture of *Gold,* which may  
nos, by evaporating the Qisp he reduced to. **a** Powder, and

by melting here Powder into *Gold.* The chief Virtues Of **this**Tincture are owing to the Oil of Rosemary.

The *Aurum Fulminans* is esteemed, not only sor its fulmi-  
Dating Quality, but also for the Medicinal Vtrues attributed  
to it.; and is prepared in this manner:. -

'. Take of Spirit of Nitre, an Ounce; distolve therein *2* Drain  
of Sal Ammoniac ; throw into this Solution- a Dram of  
*Gold* Dust, and dissolve it. by a moderate Heat. - Then

. pour into the Solution by Drops, Oil of Tartar per Deli-  
quium, till the Ebullition ceases. The *Gold* will be pre-  
cipitated like a yellow Mud; Then having poured off the  
Liquor by Inchnation; wash and edulcorate the Powder,

. and dry it in the Shades

- This Powder, even by a gentle Attrition, goes off with **a**violent Noise, and, taken inwardly, is thought to he Diapho-  
retic ; but it may more truly he said to relax the intestines, as  
was observed by *Ludovicus* and *Korting,* who affirm, that this  
Preparation being given in Fevers, in which the Patient in-  
clines th a Diarrhoea, promotes that Discharge, and, on that  
Account sometimes proves fatal.

. ’ Lastly, the Chymists tell us Very wonderful Things about  
the Philosophers Stone, or an universal Tincture ; which heing  
projected on the ignobler Metals, penetrates their Pares **so**intimately, without any visible Shew, that they are in an Instant  
changed to a Metal, that has the Colour and Weight of *Gold,*They amuse us likewise with an universal Medicine, which  
cures all Diseases, and purges the Blood from all Disorders  
by a kind of Eradiation ; so that Lise and Health may he pre-  
served sor a Very long Tune, is not to Eternity. AS I know  
nothing of this universal Medicine, T can say nothing about its  
And for the Philosophers Stone, the Materials from which it  
is to he-prepared are hitherto undetermined, as well aS the  
Method of preparing it, whatever impertinent, ignorant Pre-  
tenders may boast. .By these Pretensions, however, theyhavq  
found the Secret, if not of making *Gold,* yet of getting *Gold*already made into them Hands, and for that Reason every pru.t  
dent Man ought to.beware of them. *Geosifroy. . ’*

'Tis obvious to every one conversant in Matters of a physical  
Nature, that for a great while, especially since Chymistry he-  
gan to be cultivated and improved with Care and Accuracy,  
Remedies prepared of Gold have heen in great Repute, aS he-  
ing of a comforting Quality to the Constitution, and accommoi  
dated to the Cure of almost all Diseases; for the Antients ima.t  
gined, that the Planets had a peculiar Connexion with, and  
Influence over, the Viscera of the human Body, and, in like  
manner, over the several Metals lodg’d in the Bowels of the  
Earth. For this Reason they affixed the Names *os*thePlanets  
to Metals ; .and as they observed, that the Sun diffused  
Warmth, Vigour, Life, and Fruitfulness, to all Animals and  
Vegetables on our Glohe, they imagined that Gold was **also**capable of producing a like Effect. And this common Tradi-  
tion, or rather Fiction, infatuated not only the Vulgar, but  
also the *Litcrati,* and more especially the Physicians; to such **a**Degree, that they firmly heheved, that Medicines, duly pre-  
pared from Gold, were far superior to all others, and operated  
like an universal Cordial and Comforter.

This mistaken Notion of Gold being able to cure Diseases,  
proceeded partly from an Ignorance of natural Philosophy, and  
os the real Manner in which Medicines acted,, and partly from  
the insatiable Avarice of Practitioners; for when these so much  
extolled Preparations of Gold are brought to the Test in a chy-  
mical and rational Manner, it will be obvious, that they are .so  
far from doing any Good, that they rather do Harm ; for, first.  
Preparations of Gold, whether exhibited in Substance, or in **the**Form of Crocus, or in Powder, produce no manner of Effect,  
hecause nothing in Nature is capable of dissolving Gold besides  
Aqua Regia. And aS Metais cannot act upon Bodies, till they  
-he first so effectually dissolved, as to be able to enter their Pores ;  
and since no Liquor or Menstruum capable of producing this  
Effect is found within the Body; 'tis plain that Gold in Sub-  
stance must remain in tire and untouched, and consequently can  
produce no manner of Effect upon the human Body.

Then again, when Gold is dissolved, this can he done by noother means than Aqua Regia, or common Salt and Nitre.  
These two last-mentioned Ingredients must be thoroughly boiled  
with Gold Leaves in a sufficient Quantity of Water. But the  
Solution procured in both these manners assumes a septic and  
corrosive Nature, though that obtained by the former Process is  
more remarkably fo, than that procured by the other . sor as  
-Mercury, Copper, and Silver, when dissolved by Salts, or their  
Spirits, acquire so strong and virulent a Nature, aS by corrod-  
ing. the nervous Coats of the stomach and intestines to excite  
Gripes, Spasms, Anxieties, Purging, and Vomiting; so **the**same Misfortune attends the Solution of GOld . a few Drops of  
which, exhibited in an aqueous Vehicle, I have often sound to  
- exorte Gripes, Spasms, and Anxieties of the Praecordia.

For this Reason I think it highly proper to give a Caution  
**with,** regard **to the** wary and prudent Use of metallic Medicines,

Whether Gold or Silver, and to advise the Use of **safer Reme-**dies tn their stead.

. When many of the Chymists and Physicians observed, that  
when Gold was dissolved with Salts, or acid corrosive Spirits, it  
was so sar from restoring and recruiting Strength in an incom-  
parable and uncommon manner, that it assumed a drastic Vio-  
lent Quality, which was prejudicial and offensive to the Consti-  
tution ; .they began to think, that Gold was to he *radically*dissolved, and that by this means they should obtain a highly  
promising, and aS it were an universal Medicine. By *radical  
and intimate Solution* they mean no more than a Solution by  
which the constituent Particles of Gold are so thoroughly and  
effectually separated and torn from their original CrafiS, Union,  
and Texture, that the highest Attempts of Art shall never after-  
wards he able to reduce them to true Gold. For this Purpose  
they thought the common Menstruums entirely insufficient, and  
imagined that the Effect could only he brought about by scene  
insipid Menstruum of so fine and subtle a Nature, as to enter  
its smallest Pores, and pervade its minutest Interstices.

But.without any Contempt for the AhettorS of this Notion,  
I must, for the Honour of Truth, declare, that I think these  
Conceits of the Chymists partiy pleasing and delusive Chimeras,  
and partly interested and mercenary Frauds, by means of which  
they hunt for Fame and Riches ; for the Subtilty and intimate  
Connexion and Adhesion of the Particles of Gold are almost  
incomprehensible, fince one Grain of Gold dissolved is capable  
of communicating a metallic Taste, and a reddish Colour, to  
an incredible Quantity of Water. The Fluid then which must  
dissolve the intimate Commixtion and Adhesion of these minute  
Particles, must necessarily consist of the most subtile Parts, that  
it may penetrate into these inconceivably narrow Pores. Now  
\*tis Very much, and at the same time Very justly, to he doubted,  
whether there is in Nature a Substance from which such a Men-  
firuum can he prepared. 'Tis true there is in Quicksilver a  
highly subtile insipid Fluid, which penetrates the Pores of Gold,  
but it cannot destroy the Texture of the smallest Corpuscle of  
that Metal; for, upon the Removal of the Mercury, the Gold  
is restored to its primitive Form and Nature.

And indeed I cannot help heing surprised, why the happy  
Possessors of these wonderful *Arcana* do not talk of a radical  
Solution of some other Metal, such as Silver, Mercury, or  
Copper, fince then perfect Menstruum ought to he capable of  
dissolving all Metals, because, being more ignoble than Gold,  
their Contexture is consequently looser, and the Cohesion of  
their Parts less; but what Chymist ever yet dared to subject a  
real Experiment to the Eyes or Judgments of the intelligent, by  
means of. which a radical Solution of Mercury or Lead might  
be obtained ?

Then again, though it should he granted, that there is in Na-  
ture, or that there may he prepared by Art, such a Menstruum  
as is capable of so thoroughly reducing Gold to its first Prin-  
ciples, that there is no more any Possibility of their heing re-  
duced to Gold, yet still a Doubt remains, whether, when the  
Contexture, and Adhesion of the Gold is thus dissolved, it still  
remains to he Gold, or whether it does not pass into some other  
Substance of a quite different Nature from that Metal, fince it  
is well known, that the Form and Essence of Bedies depend  
upon the Disposition of their Pores, and the Cohesion of their  
Parts; and that all their Virtues and Operations flow from  
these, as from their original Source. Since then, upon their  
Hypothesis, so salutary and analeptic Qualities are ascribed to  
Gold, because it is so agreeable to the Heart, and Vital Spirits ;  
and since, when the Texture of that Metal is destroy'd, it is no  
longer genuine Gold ; we may from this justly infer, that the  
Virtues of a Medicine thus prepared are not to be ascribed to  
.Gold as Gold, but to another Mixture arising from the Diflo-  
Iution of that Metal ; for which Reason, such a Medicine Can-  
mot properly he called *Aurum Potabile.*

But still it would he sufficient for their Purpose, if it was ab-  
solutely evident, that such a Medicine could possibly be prepared  
from Gold ; sor 'tis to be observed, that no one has hitherto  
produced a fair and unexceptionable Example either of the  
Reality or Possibility of such a Solution. I have often told  
these impudent Boasters, that I absolutely deny'd the Existence  
of an insipid Menstruum, which, without producing a radical  
Solution, could so much aS simply dissolve the more ignoble  
Metals, much less Gold ; and have offered to pay them an hun-  
dred Dollars, is, in my Presence, they would exhibit an Expe-  
.riment of this Kind, assuring them, at the same time, that I  
should never desire to he lee utm the Preparation of this mighty  
*Arcanum,* but I never could, nor ever, shall, obtain this un-  
common Favour at then. Hands. ’Tis, however, a common  
Practice with these Artists to heve recourse to an ingenious and  
pleasant Subterfuge, by confidently saying, *if* their *Aurum Pota.,  
bile* is subjected to a chymical Examination, and no Traces of  
Gold are to he found in is, that the Merai is radically dissolved,  
and consequently can never by any Art he reduced to its primi-  
**tive** and natural State.

But as for my own Part, I should not hesitate to prefer **a**- Medicine, the Gold of which Could he reduced to ita former

State, provided It had sufficient Virtues to recommend it, he-  
fore a Medicine of less Efficacy, whose Gold could not be re-  
stored to its pristine Condition. I do not affirm, that all the  
Preparations sold for *Aurum Potabile* are absolutely good for  
nothing, fince they may heve Virtues lodged in the Menstrua,  
and Other Ingredients, of which they are composed ; bur that  
they should he sold for universal Remedies, and- at so high a  
Price, are Circumstances that must inspire every Lover of  
Truth, and Friend to Society, with just and reasonable In-  
dignation. s

These universal Medicines prepared of Gold are often af-  
firmed to be compounded and made up indhch a manner, that  
they, may safely he exhibited in any Disease whatever. This I  
myself may possibly helieVe; but the grand Question is, Whe-  
ther it can he demonstrated to skilful and knowing Physicians,  
that such Preparations have any peculiar Efficacy above other  
Medicines. . . .:

I Very readily helieVe, that many employ Gold in preparing  
their universal Medicines ; but because they are ignorant os a  
just and rational chymical Theory, they deceive themselves,  
whilst they foolishly imagine, thet the Efficacy os these Medi-  
cines depends upon the Gold; for the Whose of the Gold may  
easily he obtained by one who is perfectly acquainted with the  
Art of Reduction. But let no one find Fault with me for deli-  
Vering my Sentiments with regard to these Medicines in so open  
and candid a manner. . . Ἀ

**I** now come to examine that *cordial solar Tincture,* which is  
prepared from Gold with the Oil of Cinnamon in the folinwing  
manner: - . ...«

Let a well saturated Solution of the purest Gold he in some  
measure inspissated ; then dissolve one Dram os pure Oil  
of Cinnamon in highly rectisy’d Spirit of Wine, and let  
one Part of the Solution of Gold he mixed with three Parts  
of this Solution in a small Cucurbit placed in a Sand-heat.  
By this means these two Solutions are united into a kind  
of resinous Mass, of a Colour resembling that of Pitch,  
which, when dissolved in highly rectified Spirit of Wine,  
’ forms an essence of a deep brown Colour, and of a grate-  
ful, but somewhat bitterish and subastringent Tafts,  
which may he exhibited with Success, when the Intentiori  
is to restore and confirm the Strength of the Patient. -

But the Question is,Whether the Virtues of this Medicine de-  
pend upon the Gold thus dissolved ? I absolutely deny, that they  
do; because when this Tincture is allowed to stand for a consi-  
derable time, a blackish Powder subsides, which, when washed  
with Spirit of Wine, and dry'd, is by *Aqua Regia* speedily  
again dissolved into a yellow Liquor, which, when apply'd to  
the Skin, soon aster tinges it with a purple Colour, just he the  
Solution os Gold does.

The Reason of the Process is plainly this: **The** *Aqua Regia*concentrated in the Solution of the Gold, intimately uniting it-  
self with the diluted Oil of Cinnamon, by means os an external  
Heat, constitutes the resinous Mass, into which the'Corpuscles  
of the Gold by no means pass. But this resinous Substance,  
impregnated with the Oil of Cinnamon, is dissolved in highly  
rectified Spirit of Wine; and the Particles of the Gold, heing by  
this means disengaged from It, subside to the Bottom os **the**Glass.

In like manner, that Tincture partakes Very little **of the**Gold, which is commonly prepar'd os Sugar, sufficiently tritu-  
rated with Leaf-gold, and afterwards calcin’d by a due Degree  
of Heat; sor tho' the Acid of the Sugar may, by its Attacks,  
induce a certain Change upon the Gold, yer the Tincture, ex-  
tracted in this Process by the Spirit of Wine, is no more than  
an Extract os the Sugar gently burnt, just aS it usually happens  
in preparing the Tincture of Coral. Nor is this eafily-prepar’d  
Tincture to he entirely deprived of the Praises due to it; for  
the sulphureous oily Principle, disengaged and set at iaherty by  
the gentle .Combustion of the Sugar, is capable of imparting a  
brisker Motion to the languid Mass of Blood and Humours,  
which is a Circumstance of considerable Moment in Diseases  
accompany'd with a Defect of Strength, and in Cafes where too  
het Medicines are not proper r But, at the same time, this Re-  
medy derives none of its Virtues from the Gold, the Whole of  
which is easily obtain'd from the liquid Sugar.

Others, mixing Gold with Antimony and Salt of Tartar,  
fuse the Mass, and, towards the End of the Fusion, add a cer-  
tain Quantity of Sugar. Upon this Mixture, reduced to Pow-  
der, they pour tartariz'd Spirit *of* Wine, and fo extract a Tin-  
cture of a brownish-red Colour, and a grateful Smell and  
Taste, which they helieVe to he the genuine Essence of Gold.  
'Tis true. Gold is converted into a Powder, by heing treated  
in this manner with an alcaline sulphureous Salt ; bur, at tho  
same time, littie or none of it is receiv'd into the tartariz'd  
Spirit of Wine. However, the Tincture obtain’d in this Pro-  
cess, which is partly the Tincture of Sugar, and partiy that of  
Sulphur, can't he said to he altogether useless.

Ὕ now come to inquire, whether there is a Possibility of pre-  
wring, from Gold, a Mediane which shall he posjefc’d of any  
singular and uncommon Efficacy. And, indced, I am of Opi-  
. ninn, that this may he done; for the’ Gold, consuleSd as a  
Mend of a close and firm Texture, and which acquires a cor-  
rosive Quallty from Salts, seems to promise very little in the  
Cure of Diseases, it nevertheless has a peculiar Use, as yet  
known to few, when skilfully treated with Mercury', or with  
Regulus of Antimony, which is of a mercurial Nature; for \*tis  
sufficiently known, that the penetrating active Quality of Mere  
cury puts the Lymph of a human Body into strong Commo-  
tions. Nor are we ignorant of the active and violently emetic  
Qualities of the Regulus of Antimony; for these two Minerals,  
heing easily soluble by an Admixture of any Salt, in Coofe-  
quence of the Minuteness of their component Parts, penetrate  
very sar, especially into the nervous and membranous Systems,  
where, producing violent Motions, they excite uncommon  
Tumults in the natural Functions; and, when judicioufly used;  
are remarkably efficacious in obstinate Cbrohical Disorders.

Now, that Excess of Volatility, which, in Mercury and  
Regulus of Antimony, proves so prejudicial to thofe Parts of our  
Bodies which are destin’d for the Purposes of Senfation and  
Motion, cannot he more properly correctsd, fuodued, and ba:,  
lanced, than by an inamate Mixture of Gold with these Mi:,  
nerals; for, by 'this means, the excessive Minuteness of the  
Parts of Mercury, and Regulus of Antimony, is not only pre-  
vented/by the more fixed Substance of the Gold, but their per-  
nicious Solution on the Admixture of Salts is hindered in the  
Body ; and becaufe Gold itself is nothing more than a very  
fixed Mercuty, hence it happens, that by the Addition of a  
more volatlle Mercury it is put in Motion, and a Medicine is  
' produced, which, when cxhibited in gentle Doses, restores the  
languid Motions by mlldly corroborating the Nervous System,  
an Effect of the last Importance in many Diseases both of the  
chronical and acute Kind.

But the purer the Mercury is, and the more thoroughly it  
is separated from its phiogistic and heterogeneous Substance hy  
various Amalgamations with Sllver and the Regulus of Anti-  
mony, by Triturations, Lotions, and Sublimations, the more  
easily and quickly it admits of a Conjunction with Gold, and  
affords a highly valuable Medicine. Now ’tis a sure Sign, that  
Mercury is pure and animated, when few Parts, four or five  
for instance, to one of the Gold, .are sufficient for its Amalga-  
mation, or Solution, and. when the Mercury becomes warm  
upon its heing mixed with the Gold.-  
' Then, again, another, excellent Medicine is prepared from  
Gold, by mixing two Parts of the Regulus of Antimony with  
oneTart of Gold in a proper Firq, and converting the Powder  
into a purple-colour’d Calx in a Glafs Phial, by means of a  
circulatory Fire. This. Powder, when ’ duly prepared is, on  
account of its diaphoretic Virtues, preferable to all the other  
*Solar* Preparations whatever. ' /.

I must, m the last Place, subjoin this Advice, that when  
People intend to prepare Medicines from Gold, they ought to  
make Choice of the purest and most, free from all Allay ofSih.  
ver and Copper, with which, to use . the chymical Term, it  
'uses to he *ajsecialed e,* sor.'tis absolutely false, that the Gold of  
which the Ducats are coin’d is the purest, since in twenty-four  
Tarts of the Gold there is one of Sllver" and Copper. . But since  
the Copper passes into the Aqua Regia along with the Gold,  
. .. and since we are well enough apprised of the virulent Qualities  
even .of its minutest Particles, we may plainly perceive, that,  
in consequence 6f this, Sfl/ar *Preparations* must assume a hurt-  
nil and prejudicial Quallty. - . \_ χ

*Aurum Fulminant,* when prepared of impure Gold, as it  
'commonly is, excites violent Gripes, and isaint altogether free  
from a septic Quallty, especially when it has not been wash’d  
with Rain-water ; -whereas no fuch hurtful Effeci is to he  
dreaded from it, whin prepared with the purest and most care-  
sully edulcorated Gold. ' .’. .7 i.

Now there is no better Method of purifying Gold .than by  
what Chymists call *the Fourth Treatment,* in which one Part of  
Gold'is fused with three Paris of Silver, which when dissolved  
in Aqua Fortis, the pine Portion of the Gold remains in the  
Bottom of the Vessel. Then this Gold is to he dissolved in  
Aqua Regia, till it 'is 'so thoroughly saturated with **jt, that it**han receive no more of the Gold j but the Aqua Regia ought to  
he of the best Rinil, which is prepared am drawing Aqua Fortis  
**off** common Salt, or Sal Ammoniac. *Haffmarrni Oof. Chym.*

There is a Method of making Gold potable, which inspecti  
fled under the Article AETHER. One Drop of this is said to be  
Avery great taedia/, insomuch that, in some Parts of *Germany,*'even things little lest utat miraculous are reported *of* its reviving  
Qualities, and I am well informed, it has been frequently sold  
in that Country fur a Ducat a Drop. '.

*. Glauber* gives a very great Chatacier of a mercurial Medi-  
cine, which he calls *Aurum Harizsmtale,* **which** *Hilmont* hail  
before him taken'Notice of, not without great Encomiums. ..

If thefe whimsical Writers were possessed of fuch a Medicine,

as there is some Reason to believe they were, they deserve very  
ill of Mankind for not giving the Process more intelligibly, and  
*for* depriving the World of fo valuable a Remedy.

*Hilmont,* in some Parts of bis Works, feerns to insinuate a  
Reason, for his Conducti in this Particular, which, hewever,  
does not appear to he.very satisfactory. JHe cornplains, that  
the Physicians, instead of giving him the Honour due to bis  
Industry, loaded him with Reproaches, and persecuted him  
with Virulence, so as to endeavour to have his hook *[de Febri-  
bus)* prohibited It is possible, that a Resentment of such  
Treatment might induce him to conceal, whet it would have  
been much the Interest of his Enemies to have divulged.

*Glauber’s* Account of the *Aurum Harioumtale,* is thus '.

First, vulgar *Mercury,* by the Help of our secret *Salmiac,*may be so purified in the Space of one Day, as rhe Day follow-  
ing, by one only Abstraction of the Water of *Saltaberis,* it  
may be coagulated into a red fixed Medicine. Which twist  
Mortification, Coagulation, or Fixation, whs highly esteemed  
by *Paracelsus* and *Helmont.* This *Mercury Paracelsus* insig-  
nized with the Title of *Coralline Mcrcury,* and celebrated the  
same with this illustrious Phrase, That, in the whole Nature of  
Things, there was not any Remedy more excellent for yielding  
Rellef in the Gout and *French* Disease, adding that it recreates  
the Mind of the Artist, hecause it bath Entrance into Gold,  
and with the same is converted into Gold, and so not a few  
impoverished Chymists may again be stored with Riches. But,  
since the Death of this Philosopher, you shall not find, that  
there heth been one or other of the Professors of Chemistry  
unto this Day, who could prepare fuch a red fixed *Mcrcury.*The Reason hereof is, - becaufe none of the Sons of Art could  
comprehend the Water - of *Saltaberis,* by which *Mercury* is to  
he brought to a fixed Redness; none, I say, until *Hilmont,*that most learned Philosopher of our Age, discovered birofelf,  
witnessing that he also could prepare such *Mercury,* which he  
insignized with the Name Of *Hariocontal Gold,* affirming it  
would sufficiently supply whatsoever the Physician and Surgeon  
should need.

In like manner, that most expert Philosopher *Nuysemaxtius*wrote of such a *Marcury,* testifying that two or three Grains  
of it only heing taken in feme Coofortative, would purge out  
all Impurities from the human Body. Indeed *Hilmont* expres-  
ses this in other Words, yet by them intubates, that it  
purgeth out all Filths from the Veins. Behold three famous  
Men, serving instead of the *Iliarpestan Columns* of all *Hermetic*Philosophy, and Medicine; for they have excellently written of  
*this Mercury*.. Yetto the Inventions of thefe none of their  
Successors have added any thing, but heve been still and quiet,  
shunning the Labour of preparing an Universal Medicine.  
Whosoever is seized with a Desire, of fuccouring the Misery of  
the Sick, be will do better for publick Good, in using such a  
fixed *Mcrcury,* rather for expelling the Cruelty of a tyrannical  
Gout, and the *French* Difease, than for Gold making, unless  
so far as he hath need to use the fame for necessary Allmcnts.  
*Glauber..... e* . , . a

AUSTER, νοτος, the South Wind, which is het and moist,  
and very productive of Diseases, according to *Hippocrates,  
Aphorism* 5. *Book* 3. For this *Galen, Com. .2. in Lib.* I. *Epid,  
t.* 62. renders a Reason t Because, says he, the South Wind  
.“ causes a Dissolution of Bodies, and a Fusion of the Humours',  
“ whereby they are fubjeof to putrefy, especially if this Wind  
.“ he attended with great Rains- ’\* The Disposition of the  
Season of the Year in which the South Wind most frequently  
blows, is called *Natia, r'rri^. Australis,* or *Aastrina, Austral.*

AUSTERUS, in *Scribonius Largus,* λἰο.ι88.

. AUSTER, ἀυστηρὸς, austere,, a kind of Taste, which, ac-  
cording to; *Galen, Lils. I. de Sim. Fac. Cap.* 37. belongs to an  
earthy, mixed with a tartareous saline Substance, having an  
astringent Quality, and differing from the *Acerbus,* tart, only  
in Intenseness.. The *Cartesians* suppose Austereness to consist  
in having obtufangular Particles, likea blunt Saw. Things of  
an austere Taste are fuppofed by some, from their glutinous and  
tenacious Quallty, which obstruct the Course of the Fluids, to  
generate the Stone, though they are not without their good  
Effects.- -... - L.

AUSTROMANTIA, a pretending to foretel Events front  
**a** superstitious Obfcrvanon of the Wrads. *Pulandus.*

AUTARCIA, ἀὑτάρκβα, from ἀὑτὸς, himself, and ἀρκέω,  
to he sufficient. Self-sufficiency, Contentment with our own  
Condition it is opposed *toAplestia,* Insatiability. *Castellus,* l

AUTETES, ἀυτέτης, **the same as AUTITss, which see.**

AUTHADES, ἀυβάδης, from *daris,* himself. One who  
sets a high Value upon himself, and despises others.

AUTHEMERON, ἀυβόμερον, άυθμεραν, from ἀυτὸς. the  
same, , and: ιΐμέρο, a Day. The very same Day, *Hippocrates,  
4. Apla Book* 3. Hence a Medicine is called *Authemeron,* which  
gives Relief on the fame Day it is taken. There are two Re-  
medies of this Kind -for Disorders of the Spleen in *Galen de  
C. M. S. L. Lib.* **9.** *Cap.* 2. and in *Aetius Tetrab.* 2. *Lib. 2i***there** is a Phoenigmus Authemeros sor a scirrhous Spleen.

... AUTHIS, άυόις. again, *in Hippocrates, Lib. Epid,* it sig-  
nines hereafter, as ο δέ πυρέιὸς *atsSis ie. eases,* “ the Fever  
*" afoerwarde* never left (her).” ... . ..

. AUTITES, ἀὑτίτες.. is *by* some derived from αὐτὸς, the  
same, and ἔτος, a Year. Thus *majitns* οινος» is expounded  
*.in Galen’s* Exegesis on *Hippocrates,* by ο ἀυτοετίτης, ο έκ του  
ἐνεστώτος ἔτους, " Wine of mis present Year.’’ *Pollux* expounds  
αυτίτης ωνος. by ίέπιχώριος, " Wine of the fame Country ς”  
and *Suidas* by αυίογενὴς, " the Producti of the fame Country.”  
Others explain it by ο ἀμιγίς καὶ ο χωρές παραχὑματος, " un-  
" mixed, and without being dlluted;” and *Erotiansay* ἀπα-  
ραχυτος, undiluted.” \

AUTOCINETOS, ἀυτοκίνητος, from ἀυτὸς, itself, and  
κινέω. to move ; self-moved ; a Word by which *Galen* expounds  
ἀυτοδρομος in *Hippocrates.*

AUTODROMOS, ἀυτίδρομος, from ἀυτὸς; and δρέμω, to  
run. See the preceding Word:

AUTOGENES, άὐτογενὴς. from ἀυτὸς, itself, and γίνομαι,  
to be produced. An Epithet of the *Narcisseis* with a white  
Flower, because its bulbous Root, hefore it is set under Earth,  
puts forth Leaves, so that the Piant in one Seofe seems to  
spring from itself. *Bloncarde*

AUTOLITHOTOMOS, ἀυτολιβοτομος, from ἀυτὸς; bitn-  
felf, λίθος, .a Stone, and τέμνω, to cot: A Name bestowed  
on one who had the extraordinary Dexterity to cut himself for  
the Stone. *Castellus.*

AUTOMATOS, ἀυτόματος» spontaneous. Things arc said  
by *Hippocrates* to he done αυτομάτως, which are owing to the  
Efforts of Nature rather than the Violence of the Difeafe, or  
the Assistance of the Physician, *Aph.* a. *Bib.* j. and *Bih.* πεεί  
χυμῶν. Thus again, *Aph.* a. Lila 4. ἀυτοματα ίοντα, signifies  
such Things as past off naturally, or which Nature spon-  
taneou sty discharges. Ἀπὸ ταὑτοματε. *Aph.* 77. *Lib. 4. signifies,*according to *Galen,* έξαίφνης, " suddenly,” or ἄνευ φανερας  
ἀἰτίας. " without manifest Cause.” Άὑτοματον, *Lib.* περὶ τέχνης,  
denotes any thing that is supposed to happen merely by Chance,  
and spontaneously. The same Word, in *Lib. aesei asvaSr,*is applied to a Flatus that passes off easily without heing forced,  
and to the Air. that insinuates stress insensibly into the Veins.  
Ἀυτὄματοι χυλοι'ν in *Lib.* πεει τροφῆς. " spontaneous Juices, ”  
are such as we spontaneously, and .for that very Purpose, pro-  
vide for our Nutrition, and about which human Art and In-  
dustry are employ’d. So ἀυτομἀτως imports the same aS εζουσιως.  
voluntarilv, and of set Purpose as έκουσια έλκώματα are spon-  
taneous Ulcerations, which have sorIie external Cause.

AUTOPHOSPHORUS, ἀυτομαφορος, the same as Phos-  
**PHORUs, which see. . . "**

AUTOPSIA, άὑτοψία, from ἀυτὸς, himself, and οπτομαι,  
to feet ocular Evidence. *Autepfia* was a Word formerly pro-  
per to the Empiric Secti by which they meant the Memory of  
those Things which they bad often seen, and in the same Man-  
ner. This *Autepfus,* or the Observation and Memory of whet  
.every one sees with bis own Eyes, is also highly necessary in  
the Dogmatical or Rational Physic. *Gal. de Pare. Are. Med.  
Cap.* 2. . ’ .

**AUTOPYROS, ἀυτἐννυρος. See .ART os.**

AUTOS, ἀυτὸς.

Ἀυτὸς έωὀτου γενέ«&αι, in *Hippocrates, Lib. st. Epide signifies*to come to himself, or to his Senses. Thus, in the fame way  
of speaking, εξ εωυτου' ειναι is to he out of his Senses; and  
έντὸς ώὑτου έιναι, in the same Book, is to he. in his right  
Mind or Senses.

Ἀὑτως, in *Galen’s* Exegesis. is expounded by ματαίως, vainly,  
rashly *Hesecbius* also expounds it by μάτην, in vain.  
- AUTOUR, a sort of Bark, in Shape and Colour much -re-  
serubling Cinnamon, only a little thickerand paler the Inside  
is of the Colour of a broken Nutmeg, with a Multitude of  
Spangles. It is almost insipid, and has no Smell at all: We  
have it from the *Levant*; and it is one of the Ingredients in  
the Carmine Dye. *Lemery des Drogues.*

AUTUMNUS, φβινὄπωρον, οπώρη. theAutunm. The Dis-  
eases particularly incident to this Season are, Fevers of an ano- '  
masons Kind, Pain of the Spleen, Dropsy, a Consumption,  
which the *Greeks* call φβίσις (Phthisis), a Difficulty of Urine,  
which they call στρμγγνεία (Strangury), that Disease of the  
small Intestine, called by them ειλεὸς (the Iliac Passion) ; he-  
sides a Flux *( Limitas intestinorum),* called λεςεντερία (a Lientery),  
Sciaticas *(Coxa Dolores),* and Epilepsies: This Season is alfo  
liable to long and tedious . Distempers, and proves mortal to  
thefe who have lingered under Distempers during the preceding  
Summer.. Some it destroys with new Diseases, and involves  
others in very lasting ones, and particularly Quartans, which  
hold all the Winter. Nor is there any other Season of the  
Year more subjeA to pestilential Distempersof all sorts, and of  
**all** Degrees of Malignity. *Celsos, Lib. 2. Cap.* I.

The greatest Danger is in Autumn, because of the Variety  
of Weather; therefore never go abroad without (good warm)  
Garments and Shoes, especially on a cold Day . nor steep in the  
open Air, at least without being well covered. You are now

allowed th eat somewhat plentifully, and to drink your Wine  
less diluted, but in smaller Quantities. Some think Apples'  
hurtful, which are commonly eaten in immoderate Quantities  
all the Day long', without lessening that Proportion of more  
solid Fond ; fo that not the Apples, but the Sum of ail that is  
eaten, taken together,does the Mischief, in which, hewever, the  
Apples are the least concerned'. But it is not proper to eat  
these more frequently then other Fond; and, in short, it is  
necessary, when they come in Use, to diminish out Allowance  
of more solid Fond. *Celsas, Lib.* I, *Cap.* 3.

The Autumn heingan unequal and disorderly Season, which  
produces all Kinds of Diseases, great Care is to he taken of the  
Diet and way os Living, that no Error may be committed in  
Concoction, the Use of Venery, or drinking cold Liquors, but  
that Men should he temperato in all things. To this End, we  
are to avoid the Intemperature of the Air, which in the Morn-  
ing is cold, and sultry at Noon, and not fill ourselves wish  
Autumnal Fruits, which are prejudicial, not only on account  
of the Plenty, hut Malignity of the Humours and Flatulencies,  
**which** they generate, since the best of them, which are Figs  
and Grapes, breed Flatulencies, and corrupt the rest of the  
Aliment, except they he taken hefore other Food, in which  
Case they have no such ill Effecti; As the Ain grows colder,  
the Body is to he heated in proportion, and we are to manage  
in all things with an Eye to the Approach of Win *ter .* Aster  
the Eqninox, it will he convenient to make use of some eva-  
cuating Medicine; that no superfluous Humours may create  
Disturbance, and interrupt out Health, during the Winter.  
*Oribase. Eupend[i. Lib.* I. *Cap.* io.

AUVER, pure, or soft Water. *Biclandusi ' ,*

AVULSUM, AVULSIO, ἀποσπαστὸς, ἀπόσπᾶσμα. See

**APOSPASMATA. ' . -**

AUXESIS, άυξησις^ from άυξάνω, rd increase. The same  
**as AUGMENTUM, which fee.**

AUXILIUM, βοήθημα, βοήθεια. Assistance i in **a** medicinal  
Seofe, whatever assists Nature against a Disease; and so is the  
fame as *Remedium,* or *Medicamentum.*

*Celsos,* in Anfwer to those who said, *Orrine Aurilium necesse-  
rium ep.se increseentibus Morbis, rum cum yam per se finiuntur,*" That Assistance was always necessary in the Growth of Dis-  
" tempers, but superfluous in their Dedine, when, if let alone;  
“ they would terminato of themselves,” asserts the Case to he  
otherwise;. because, fays he, a Disease, which would of itself  
terminate, may yet be sooner taken off by proper Assistance,  
which is necessary for two Reasons r first, that the Health may  
he re-established as soon as possible ; and next, that the Re-  
mains of the Disease may not. On some flight Occasion, he ex-  
asperated. For a Disease may he less troublesome than hefore,  
and yet not quit .the Patient, but held fast by Reliques, which  
by Assistance may he discussed. *Celfus, Lib.* 2. *Cap.* I4. '

In a quite desperate Cisse, it would he a Piece of Weakness  
to expose, by Trial, the most successful Remedies to the Re-  
proach of ignorant and unskilful Pretenders. I know: some  
Physicians unacquainted with Method; who, thinking to imi-  
tato our Practice, heve tried our Medicines upon Persons whe  
were almost dead, and so rendered the seasonable Use of them  
sufpectid and dreaded. *Aetius, Tet. 2. Serm. I. Cape* 78.

AUXYRIS, a corrupt Word for OsYRIs,Touts Rosemary,  
which fee. . '

ΑΧΕΑ COMMISSURA, τροχοείδίς. A sort of Aided-  
lation. . See TRocHOIDRs. ..' - . ' '' - -

, AXEDO, a Spell, in *Marcellus Empiricus, Cap..* 33: Yo  
render*R* Person impotent: — . *'.f ' ' . . " ""l' soi.*

AXICULUS, a Roller or Cylinder, *Rulandus. "so" '~“-*AXILLA,-μαγάῶί, μαχ4.ες. The Cavity under the Arm,  
called.the *Armhole, os Armpit. , “ ''s:* Ἀ

AXILLARIS VENA,*AAcderidescecgullum oseydurv* φλέβὑ  
the Vein that passes1 through the Armpit. *Cealumi* TheAkil-  
lary.Vein. SeeVENAv z ' - ' . . \ , .I ' T ’ u

AXIOLOGOS, a5ilao^^',,from ἄξιος, worthy, ληἁἌογος,  
**a** Word. Worthy of Notice. *Hippocrates,* in his Coin. *Pra~  
notiones,* applies this to ἀποστημα, Apostemation, where tt his-  
ports, considerable, sufficient *for* a Crisis. "

AXIOMA, ἀξίωμα, an Axiom. This signifies a Proposition,  
which neither requires, , tior. admits of. Demonstration. But  
the Art of Physic has the Misfortune to have a great many  
Propositions laid down as Axioms relative to it, which greatly  
require, . het, hewever; do not admit of. Demonstrationi

AXIOPISTIA, ἀξιοπιστία. from ἄξιος, worthy, and πίστιί.  
Faith, Confidence. It imports Authority.. . a

AXIRNACH, superfluous Fat, which sometimes grows in  
the Turncs of the upper Eye-lids ; this frequently is sound in  
Children. *Castellus* from *Albucasts. \* \* su ' s*

AXIS, ἄξων, a Name given to a Tooth-like Eminence in **the**second Vertebra of the Neck. z See VERTEBRjE.

' AXUNGIA, ἀξουγτιον, ἀξιουγγνα, οξὑγτιον, signifies strictiy  
old Hogs Lard, or, in genend, old Lard, or Suet of any other  
Animal. SeeAroRps. . . j

**. AXUNGIA DE MUMIA, is Marrow.**

AXUNGIA VITRI, is Sandiver, or salt of Glass. **A**kind of Salt which separates from the Metal of Glass whilst in  
Fusion. It is of an acrimonious and biting Taste. The Far-'  
riers use it for clearing the Eyes of Horses. It is also used  
for cleaning the Teeth; and is sometimes applied to running  
Ulcers, a Herpes, or the Itch, by way of Desiccative.

AXYRIS, the fame as AUXYRIS, winch see.

AYBORZAT, Galbanum. *Johnson.*

AYCOPHOS, burnt Brass. *Rulandus. „ - \_ . .*

AZAA. *Rulandus* explains this by *Magra, Terra rubea.*

. I suppose he means *Marga,* Marl.. -Red Mark

AZAGOR, Verdigrise. *Rulandus. -*

AZAMAR, Vermilion, or Native Cinnabar. *Ruland.*

AZAMO. *Rulandus* explains this by *Color Indus,* but I can-  
not tell whet he means, unless *black,* or a Mixture of Blue  
and Purple, which is the *Indicum os Pliny.*

AZAN EC. The same Author explains this by

ARMONIACUS. I suppose he means the Salti

AZANITTE ACOPON, the Name of an Acopon or  
Ointment in *Paulus As pineta. - .*

AZANIT .de CERATU M, the Name of a Cerate in *Ori-  
basius.*

AZARNET, Auripigmentum. *Rulandus. . .*

AZAROLUS. A Name for the *Mespilus Aradia.1 Neapo-  
litan* Medlar.' ’ . : ' ... ..... .

AZCI, Ink. *Rulandus. -*

i AZeC, green ink.. *Sadem. ... . -*

AZeDARACH, *Pseudos.ycarnorus,* Ossie. Mont. Indi 37.  
*Azedarach,* Tourn. Inst. 6 I6.. Elemi. Bot. 489. Boerh. Ind.  
A. 2. 236. *Anedarach Avicemtee,* Parle. Theati I442. *Axe-  
darach arbor Fraxini sciis, store coeruleo,* Raii Hist. 2. 1346.  
*Azadaracheni arbor, so* B. i. 554. Chain 44. *Arbor Fraxini  
folio, flore caeruleo,* C. B. Pin. 4I5. *Zizipha Candida,* Gec.  
I3O7. Emac. I49I. THE BEAD-TREE. . A

The Flowers of this Tree are said, by some, to he  
aperient and deobstruent; but- others say they are poison-  
ous. .., , ,. ... „ - si - ς " .

AZEDEGRIN, the Lapis Haematites. *Rulandus.*

AZEFF, Scissile Alum. *Ibidem. --*

AZEG, Vitriol. *Ibidem.*

AZEGI, the sameas As Ad.- .. .

ΑΖΕΜ, or AZOM; *Rulandus* explains this by *Butyrum  
coctum. . . ..... . - ‘ νύ- ’.. -*

AZEMASOR, Native .Cinnabari i *Ibiderrt. - so .*

. AZENSALll, a sori of black Stone found amongst  
Gold. It signifies also a fort- of Moss winch grows on  
Rocks. ώ *dur -r-.-'.ln* S .ss ) . -τ- *s' -*

ι AZERNEC, the same as- AL FA T IDA , which **see.:** . λ : .

AZIMAR, Flos-Airis,-ortEsUffam. -See .ZES.

AZIUS LAPIS. See ASSIUsTAPIS. - ’ - ' /

AZOB. *Rulandus* explains' this by *Alumen Saccharinum.*

. AZOCH, AZOCK, AZOTH. Barbarous Names given  
*by Paracelsus to* the *Mercurius Philosephoruin,* that is, - Quick-  
filver extracted from any metalline Body, winch is the proper

**, - . - ..**

corporeal Mercury. In another Sense, *Accatih, in Paracelsus,*signifies.the universal Remedy prepared of Mercury,, the Sun,  
and Moon, Void of all specific Differences; and endued with a  
most intense Efficacy, and a most general kind of central Vir-  
tue,; Including all other Remedies in itself, in the same manner  
as the *Substantia .Prima,* or first Substance, includes all the  
rest, excluding Accidents. This *Paracelsus* was reported to  
have carried about. with him in the Pomel of his Sword.  
*Rulandus...* -.δ᾽ S

Azo TH is also taken for the Liquor of sublimed Mercury,  
(or Quicksilver mixed with Vi triol and Salt, and so sublimed)  
which is also called *Aqua Permanens, Crystallus Philosophorum,  
Luna Physica,* or by whatever other mystical Name they please  
to give it.. *Libandus. . - - τι*

A2OTH is alfo the sarne as *Laton,* that is, Copperitincturtd  
with a. Gold Colour by Its Mixture with Lapis Calaminaris,  
which is the same as Aurichalcum or Brass, *Johnson.*

AZRAGAR, Verdigrise. *Rulandus. ' . .*

AZUB,-Ahim.. *Ibidem. \_ . .*

? AZUBCso *Rulandus* explains this by *Fas Chymicum t* But  
**.1** do not know whether he means some particular ChymicaI

Vestel, or a Chymical Vestel in general.

AZUR, Red Coral. *Rulandus. -*

AZURIUM, the Name of a Chymical Preparation de-  
-scribed by *Albertus Magnus.* It consists of two Parts of Mercury,  
one third of Sulphur, and one fourth of Sal Ammoniac ;- these ..  
are to he mixed together in a Mortar, and put into a Glass  
Vessel,, which is to be set over the Fire till a bluish Smoke  
arises; then it is to he taken from the Fire, the Glass is to he  
broken, and the Contents are to he powdered, which is the  
*Auserium. ..* .. . 'S’'-\*".

. AZYGES, ἀζυγές.- A Name for the *Os Sphenoides.*

AZYGOS, ἄζυγος, from α Negative, and ζυγὸν, a Pair.  
Δ Vein situated within the Thorax on the Right Side, having  
no Fellow on the Left, whence it is denominated *Ascygos,* or  
*Vena sine Pari.* See-VENAE.

- AZYMAR, Native Cinnabar. Vermilion. -

. AZYMOS, ἄζυμος, from α Negative, and ζὑμη, Fer-  
ment. It generally signifies unfermented Bread, such as *Sea  
Biscuit,* which, *Galen* verT justly observes, is extremely un-  
wholsome. Every one is sensible, that, by mixingWater with  
Flour,- a Viscid and tenacious Paste is form'd ; and Sea-biscuit,  
when moistened in the Stomach, is Very likely to form-the fame  
kind of Viscid Substance; unless the digestive Powers are excese  
sively strong. But Fermentation destroys this Viscidity,: and  
renders farinaceous’Vegetables!more easily digestible; but at  
the same time inclines the Substances fermented to Acidity»  
-For this Reason unfennented Bread can only he proper, when  
the Stomach abounds with Acidities. \_

This Account of unfennented Bread I thought the more’  
necessarybecause *Sea~bis.cuit,* a very unwholsome Fond, has  
of late heen much in Use; and I find is, by some, very eno-  
neouby esteem'd preferable to Bread which has been fermented  
with Leaven.

*... Dio. ... t .- .a* . χ.-i . . i . *. a.. .. or, .., ... . ...*

Β. in the Chymical Alphahet,.’ signifies\* Mercury,accord-

ino to *Raymond Lully. A*

**. 9** BASUZICARIUS, ἝἀβοῦζίΛοἄρὶος; *srcTRsi Sesuddfa,*so speak inarticulately, r The Incubus,, or. Night-mine.ς f'''  
- BACANON, heraoEov. This - Word as. used by *Trallian,  
uBdastaultii Aapsinetagi* and signifies the Seedsof Cabbage. There  
isdim *'MyrepsmgrCo* i^Gi.-an Antidote which takes . isa Name  
from *Ba canons* and tssaid to he al good Hepatici Medicine;- t  
*s -* BACAR. *Dlasiellus,* -from *Rulandus,. sms,* this is the*suatin*

*Pondus,* aWeiglitA ..v j ; ΐε

ί BACCA, that is, Ἀ Berry, Is1 w round Fruit,, for the most  
part soft, and'boVerethwith a thin Skin; containing Seeds in a  
pulpy Substance-;: but ifjt he harder, and cover'd witha thinker  
Skinf.it is call'd *Plenum,* that iny an Apple. - - στ- - - -  
„ - BACC/E are’ small roundish Fruits, that grow scattering  
upon Trees and Shrubs,...and in thet ute dishnguishtd *srceAn Acini,*which are Berries hanging, in Clusters. / ' st ' 1

*Bacca,* in a more strict Sense, are used Tor a smaller shim,  
ikin'd Fruit, of a*-soft* Pulp and-Flesh,-including moist Seedsin  
a thinner Membrane; - Hence, : . - - ’ -1 l . - .

**BACCIFEROUS,** *( Saccifer, Latlsussi Bacca,* **h-Berry, and***fero,* I bear) is- an Epithet, added -to theNames .of any Trees,  
Shrtibs, or Plants, that - bear Berries,1 as. Bryony, Dwarf. Honey-

r'.- . - στ' - .... ..... ' . ς - -

shnkle, Lily Of the Valley, Asparagus, Bntchers-broom, Night-  
shade, Solomon’s-seal, and many others. *Millrtis Dictia-  
-nary.* - "t - . ’\* - ’ ’ - X -. "

*BACCAE* **BERMUDENsEs,** *Pilulcr Saponarice Anglorum.*

. o . This Fruit, wheIr fresh, is of 2. black Colour, inclining to  
Red,-and-something traiisparedt. As itgaiows old,- it turns still  
blaclths, --’ It contains aryellowish Kernel; the Taste of which  
as-disagreeables This Nerndistaep'din'Water, raises aTroth  
Iike^Soapry and this lhshsion is used in *Chlorofesd* and in Ob-  
strudtions of the Liver.. *Ceoffroy. ... . . - - '*

- ; They are the Pruitsqf the ARROR\* **SApONARIA. ; .**

BACCHARIS, ς Ossie. *Monfpiliensittm,* Ger. 647. Eniae.  
792. Joaii Synop. 831 Parkinson, |T4. Drll. Cat. I49. *Cony-za  
eaasor,-* Schw.4.5.*J Conyza mayor vulgaris, Q. E.* 265. Ran  
HIst2.I. 292. Tourn. Inst. 454. Boerh. Ind. A. II6. Buxb. 81.  
*Cariplaa mayor Mattbioli,' Baccharis quibusdam,* J. B. 2. 105I.  
*Conyza major isgenus, Bdcchatits quibufdam.* Chain 327.;Ἐκφασ  
*Tortum-' montanum Virbafci folio, vucraorius Baccharis dictum,*-Hist. Oxon. 99. ‘ PLOWMAN'S0 SPIKENARD. -  
’ -Some call it *Baccar: A.'.' . '*

*Baccharis* is a sweet-scented shrubby Plant, of which they  
rise try make Garlands. The Leaves are rough, and of a Size  
between those of the Violet and Mullein. The Stalk is bent

.into Angles, and rises th the Height of a Cubit, is‘somewhat  
rough," and not without Suckers. The Flowers are of a purple  
Colour, inclining to Whito, and have a fragrant Smell; and  
**the** Roots are like **these of** black Hellebore, and smell like **Cin-**namon. It delights in a rough dry Soil. ,. . .

The Root, hell’d in Water, is effectual in Convulsions, Rup-  
tores, Falis, Difficulty of Breathing, Did Coughs, and a Dif-  
, ficulty of Urine;,.it provokes the Menses, and, given in Wine,  
is good against the Bites of venomous Creatores. One of the  
. tender Roots, used as a Pcflary, brings away the Birth; and  
the Decoction thereof is of Service, by way of Infession, for  
Women in Child-bed: It is a very proner Ingredient in *zDia-  
pasen,* on account of its extraordinary Fragrancy. The Leaves,  
which have an Astringcncy, make a proper Cataplasm *for* Pains  
' of the Head, an Inflammation of the Eyes, a beginning *Acgi-  
.. laps,* an Inflammation of the Breasts after Delivery, and an  
*Eryftpelas :* The very Smell of it provokes Sleep. *Diofcsrides,  
Lils.* 3. *Cap.* 5I.

From a branch’d woody Root, shooting forth many Fibres;  
this Plant fends out several round, fofrish, hairy Stalks, three  
. or four Foot high; the lower Leaves grow on long Foot-stalks,  
being about three or four Inches long, and about half as broad,  
hairy, indented about the Edges, and blunt-pointed; the  
Leaves which grow on the Stalks are narrower. The Stalks  
are pretty much divided toward the Ton, bearing a greatNum-  
her of naked yellowish Flowers in sealy *Calices,* which pass  
away in Down; the Seed is long and sicnder . the Leaves and  
Flowers heve a strong pleasant Smell. It grows in hilly chalky  
Places, and flowers in *July.*

.. The’ this Plant is but rarely, used, yet some account it a  
good Vuinerary, and ufesul in Bruises, Contusions, Ruptures,  
and inward Wounds, Pains in the Side, ar,d Difficulty of  
Breathing. *Miller*’s *Bot. Oof*

We learn from *Aristophanes, Pliny,* and *Athenaeus,* that a  
precious Ointment, much esteem’d amongst **the** Antients, was  
call’d βάκχαεις, probably from this Herb heing a principal In-  
gredient in it. *Hefychius* fays it was also call’d *Myrtle Oint-  
\_ anent,* and *Lydian Ointment.,* and *Galen* explains is **a** *Sort of  
. Lydian Ointment.*

*Hippocrates,* in his Treatise *De Natura Muliebri,* describes  
a Case, which seems to he an Abscess in the Uterus, and is  
much like the Cafe relaced by *La Matte, Observation* 429.  
wherein, as related by *Hippocrates,* a Hardness is perceived in  
*.the ilia,* and a Pain in the Bottom *of* the Belly. When this  
happens, he advises the Patient to he on the Side least affectsd,  
and to apply this Ointment (βάκχαβιν) to the same Side, or whet  
he calls *the White Oil.* He alfo takes Notice of the sameOint-  
ment in other Places of his Treatises on the Disorders of Wo-  
men. 1 - \_

BACCHICA. The same as *Idedera,* the Ivy. *Blancard.*

BACCHUS, Wine., It also signifies Ἀ sort of. Fish, the  
fame as *Mugil,* the Mullet. *Castellus.*

BACCINIA, the same as VACCINIA, which see. *Blanc.*

BACHARIS, the fame as *Baccharis. ‘ .*

BACILLUM, a small Stick, Or any thing in the Shape *of***one.** Thus a fort of Troche, made of pectoral Ingredients,  
round and long, thet is, in the Form of a stnall Stick, are  
call’d *Bacilla,* or improperly*Aacilli.* Many Iran Instruments  
of the fame Form, which are used in Chemistry, are also thus  
call’d.

The *Aves Cypria,* or perfum’d Candles, are from their  
Shape also call’d thus.

BACULUS. The same as *Bacilltum,* and is more generally  
used, to express the same thing.

BADISIS, βάδιοις. The Action of-Walking.

BADITIS. A Name, for the.Nymp.haea, or *Clava Herculis,  
in Marcellus Empiricus;* who says the Root of this, bruised,  
and eaten **with** Vinegar, for **ten** Days, by **a** Boy, makes him  
An Eunuch, without ExscifliorL ...... so.. . .. . ./,- t

**BADUKKA. The proper Name for the** *Capparis arborer  
feenslndica, Floretetrapetale. - - "*

, - The Juice of the Leaves, mix’d with the Fat of wild Boars,  
-makes a Liniment for the Gout. A Decoction of the Leaves  
and Flowers affords a Liquor, which, drank, purges **the** Belly ;  
:iand the Steam thereof, received into the Mouth, deterges Uf  
cers therein. The Emit, taken in Milk, causes Impotence.  
*Raii Hisci. Plant.* .is

BAEOS, βαιὸς, in. *Hippocrates,* signifies sew. Βαιὸν is- on  
Epithet for aMalagnu, in *Paulus Acgrneta,Tib.* 7, Ce XS.;

BAGEDIA, a Pound of twelve Ounces. *Johnsen. ; .....*

BAHEI COYOLLL This, in the: Opinion of *Flor,. .is*the same as theAtmi, *orFaofel. .? e - . . -*

BAHEL SCHULLI. .An *Indian* **Tree,** call’d allo *Genista  
spinofa fndica verticillata, stare purpuro-ccurideo. \_ ’ o*

*It is a* thorny Shrub, that grows in wamy Places; but there  
'is another Species of it, which grows in fandy Ground, wish  
Stalks and Leaves of a bright Green, and white Flowers, -in-  
.dining somewhat to a Sky-blue. *l. .*

The Decoction. of the Root provokes Urine, and frees the  
**Patient labouring under a Suppression of the same , whence in**

**cures the** Dropsy, especially if it he hell’d with the Oll of the  
ι *Ficus infernalis.* Tine Leaves, boiPd, and pickled in Vinegar,  
have the fame Effects. They make a Powder of the Leaves,  
which, drank with the Oll express’d from the Flowers of the  
*Ficus infernalis,* helps to discuss aTumor in the Pudenda of the  
Male Sex.. *Bay. Hist. Plant.*

*BMAC,* Ceruss. *Rulandus.*

BALA, a Name sor the *AAufa,* **or** *Musca Arbor. Eaii  
Hisp.*

BALAENA, Offic. Recch. Hist. Mex. 568. *Palana vulga-  
ris,* Aldrov. de Pisc. 688. Jonf. de Pirc. I52. Cbarlt. Pisc. A6.  
*Balano vulgaris edentula, dorse non pinnate.* Rail Synop. Pisc.  
6. *Balaita major, laminas in superiore maxilla habens, bipennis,  
fistula carens.* Sib. Pbal. 27. *Balaena vulgo dicta sene Museu-  
lus,* Rondel de Pisc. I. 475. *Balaena vulgo dicta fine Masti-  
cetus Aristotelis, Museulus Plinii,* GesiL de Aquas. I I4. *Cetus,*Schrod. THE WHALE.

The Fat of a Whale is said, by *Schroder,* to he a good Topic  
for the Itch. The Oll is more used in Mechanics than Medis  
cine. It is call’d *Train-cil. Pornet* gives the following Account  
-of the Wbalp.

The Whale is the largest of all Fish, and is to he found in  
the Northern and North-west Seas. The *Sceleton of* one was  
shewn at *Paris* in I 658, whose Skull was between sixteen and  
seventeen Foot long, weighing sour thousand six hundred  
Pounds ; the Jaws ten Foot wide, and fourteen Foot long,  
weighing eleven hundred Pounds each ; the Fins, which look  
like Hands, weighing each six hundred Pounds; the Joints of  
the Back, from the Head to the End of the Tall, forty-five  
.Foot long ; the first Joints weighing fifty Pounds, and the  
others less, according as they came nearer the End. I shall not  
trouble myself to give an Account of all that relates to thet  
.Animal, or the Manner os taking him, because several Authors  
have treated os it; but I shall only say, thet there are two  
sorts of Whales.; the one is call’d *Cachalot,* which differs from  
thet which is call’d the *lphale,* in thet the Mouth of the *Cacha-  
lot* is furnish’d with little flat Teeth, without a Beard or  
Whiskers ; which is contrary to thet which bears the Name of  
the *tVhale,* which has nothing but Whiskers. ’Tis from.the-  
Fat or Lard of these Animais, that they draw *Whale-oil,* which  
is a very great Commodity, especially in Times of Peace, by  
reason of the great Use they have for it in *France,* as well for  
burning as several other Ufes, wherein it is very necessary, par-  
ticularly for refining Sulphur, and preparing some sorts of Skins  
for Leather. We have two sorts of Whale-oil come to *Paris,.*the best of which is, thet which we call *Haile de Grande Bate,*which is, by the *French,* made of the Fat immediately after in  
is taken .from the *Whale*; whence the *French* Oils do not smell  
so ill as thofe made in *Halland,*becaufe the *Dutch* do not make  
their Oiis from the Fat so soon as it is drawarfrom the *fVhale,*but bring it into *Halland* to he melted : Wherefore we ought  
to profer the *French* Oils to these of *Holland,* which .are easily  
known, because the *Dutch* are red and stinking, and yet are  
olear. The great Quantities we have of Whale-oil come  
from she Northern Sea, especially *Greenland,* from whence **the***Hollanders* are supplied. *Pornet.*

The *Sperma Ceti* is, on all hands, agreed to he the Product  
of anotherjortof Whale, which is call’d

*Cetus,* Offic. *Cete admirabile aliud,* Cius, Exos. I3I. *Balae-  
na,* Met. Pin. I9O. *Balaena rnacrecephala, qua binas tantum  
pinnas laterales habet.* Sib. Phal. I2. *Balaena major, insaricre  
tantum maxilla dentata, macrscephaia bipennis,* Raii Synop.  
Pisc. I4. *Balaena,* Ejofd. Ictis. Tab. A. f. 3. *Cate,* 4I. *Cete,*Josist Tab. 42. *Trcrnpa,* Park. Tbeat. I6o7. *Sperma Ceti  
falsa dicta,* THE PARMASITTY WHALE. *Dale.*

It has been long disputed^what the *Sperma Ceti* is; het  
*Pomers* Account of it is the most satisfactijry I heve met with,  
tat to.lon Preparation, tat.be. has seen it madedand. done inhim-  
selsi a. ed. c..’ *isms.*

The *Sperma Ceti* is the Brainof a sort of *lVhalequiA’suByaris,*and, by. the;People.of SI. *JesinAn Eusc, .Cacbalit.* .This Ahis  
Inal is named, by. some,- theMale *Whale, tmd,suAatin,iOpra.*It. is about twentyrfivo Foot long, anil twelve Toot high,-, each  
of the Teeth weighing one ,Pound, which are.very useful for  
feveral sorts of worke^ . TheseCreatures are .very cornmonjdt  
*CapiPinestre,:ou* the Coast os *Caliciarsqui.in Narway. -* In  
the Year I688, there was one taken by *zsopanesti* Ship that car-  
iied-it 'to. sL. jSolascnin’s,- from the.H ead of which were taken  
..twerim-four. Barrols-of .Brain; and fromStheEody; ninety-sec  
Bands.of Fat They ought then to hei undeceived, wed  
helieve, thet *Sperma Ceti* is any thing else but the Brain of the  
*Cachalot.,* and scan affirm this with Certainty, not hamng  
only seen this prqdurd,. but having prepared in inyselL T - .cn

This *Sperma Ceti* is usually prepar’d at *Bayonne,* and *St. John  
AcLutc s* and this Work is so rare in *strdace,* that there are *ροζ*uboys.two. Person3 at the .letter Place whe know hew to prepare  
is. Those who prepare, take the Brian as -aforesaid, and melt  
μ over agende Fire; then they cast it into Moulds, like these  
wherein they refine Sugar v and after rt is coord, and drain’d  
**from the Oil, they take and melt it again, and proceed** aster the

same manner, till such time aS it he well purified, and very  
white; then with a Knife, made for the Purpose, they cut it  
into Scales or Flakes, just so as it appears when brought to us.  
As this Commodity is of some Consequence, by reason of sta  
Price, I must observe, that we ought to chuse such as is in fine  
white Flakes or Scales, that are clear and transparent, of a fishy  
Smell; and take care, that it he not augmented with white  
Wax, aS it happens but too often, winch is easy to distinguish,  
as well from the Smell os the Wax, as because it is Very .thin,  
and of a more unpolish'd White; for we heve no Commodity  
which is so sensible of the Air as this, which is the Reason why  
it ought to he carefully Icept in Glasses, or in Barreis, close  
stopp’d from the Entrance of any Ain, lest it turn yellow.  
*Pomet.*

*. Pomet* may possibly he right, as to the Process generally  
used for making *Sperma Ceti* ; but I heve seen *Spcrma Ceti*which has undergone no Treatment at all, except bring put  
into Paper Bags, so that the Oil which adheres to it, may he  
absorb'd. The true *Sperma Ceti* is Very white, and in very  
small Flakes, not much larger than the Crystals of Tartar :  
It dissolves by rubbing upon the Hand into a sort Of Oil , and  
does not adhere to the Palate when chew'd, as the common  
Sort will; which makes me suspect, that it is mix'd with some  
other Substance, perhaps Wax, by those who make it sor Sales  
I can affirm with Certainty, that *Spcrma Ceti* is neither the  
Oil, Brain, nor Sperm of the Whale, but a particular Sub-  
stance found principally in the Head of the Fish; and flakes  
like boil’d Salmon, or Cod, when taken out. It is also sound  
in other Parts of the Fish, but not in so large Quantities, or  
so good, as in the Head.

i It is a noble Medicine in many Cases, tho' principally used in  
Bruises, inward Hurts, and aster Delivery. It in an excellent  
Balsamic in many Distempers of the Breast; and. gently  
deterges and heals. - In Coughs, from sharp Rheums; Erosions,  
and Ulcerations, it is Very safe, pleasant,.and effectual; as.  
also in Pleurisies, and inward Impostumations. . Where the  
Mucus of theBoweis has been abraded by Acrimony and Choler,  
as in Diarrhoeas, and Dysenteries, thin is a Very good Healer.  
In Ulcerations *of* the Kidneys, and bloody Urine, it.is likewise  
a Very suitable Medicine; and, by softening and relaxing the  
Fibres, it contributes frequently to the Expulsion of Gravel, by  
. inlarging the Passages. It is most conveniently made up into  
the Forms of Electuaries and Poles, with proper Conserves,  
and Things of the like Kind r And in such Forms, if it be  
skilfully mix'd, it gives them an agreeable Smoothness, and is  
. ' not discoverable by the Patient. It is also Very properly dissolv’d  
. in a Draught, by the Help of the Yolk of an Egg in or it is

made into an Emulsion by the same Management. ; The. usual  
Dose is about half a Dram. . . . i . .. :

It is emollient and healing, outwardly used; but its greatest  
Use that way is in the Small-pox, melted with Oil of Almonds:  
With this the Pustules are just kept moist, when they begin to  
- harden; and it wonderfully prevents those Scars they are apt to  
leave, by sostenino, and healing them up smooth.. Altho’ this  
is but a modern Practice in this Distemper, *yet'Schroder* takes  
Notice of its Use in his Time, in smoothing and filling up the  
Fissures, or Cavities, made by Blotches and Scabs. . .. ..

. It is sometimes used as a Cosmetic, both in Paints, and in  
Pastes, to wash the Hands with.

BALAM PULLL A Name for. the Tamarind-tree., *Raii  
Hast. Plant.*

BALANDA, **andVALANIDA, are** Names **sor** *gicaeAEfculus,***or Beech. -** *Blancard.*

BALANDINA, a factitious Stone mention'd by *Raymand  
Lully.* AS I do not understand the Original, it would he  
somewhat difficult to translate it. I shall therefore, give it, aS  
. he has done, in *Latin,* in hopes, that those whom, it may con-  
cern may understand it better than myself. .. . ...

**BALANDINA** *componitur ex argento vtvo fenei,, et .ast calaris-  
rubei valde, et resplendet ratione sulphuris decocta et conversu  
in naturam aqua acreee ignitae respiciens naturam argenti vivi ;  
et quia sua natura est ex acre, ideo restringit sanguinent. Recipe  
ergo de aqua aerea sicrri, et imple mollem ceream post' virtutem  
restrictivam acceptam, et indura illam in aqua terrestriapiastricti--  
va ferri, et profequcre pcr informationes supradictas.*

BALANI, or **GLANDES.** A sort os Shell-fish, so call’d  
from their Shape, which is like that of an Acorn: They are  
also call'd *Pallicepedes.* Of these there are many Sorts,:, which'  
are sound adhering to the Rocks on the Coasts.os *Spain-, Briar  
tany,* and *Normandy.*

As a Fond, they are esteem'd aperitive.

BALANOCASTANUM. The same as **BULBOCAST.ike.  
NUM, which see. .. ..**

BALANOS, βάλανος, properly signifies an Acorn ; but.  
*Hippocrates,* in his Treatise *De Assertionibus,* uses it to express  
an Oak. It is also made use of sometimes, aS in *Theophrastus,..*to signify any glandiferous Tree.

Hence, from the Similitude of Form, *Balanos* (βάλανος) is  
frequently used to express Suppositories and Pessaries.

*Balanos* **also signifies** the *Glans Penis..*

BALANUS MYREPSICA.

*;. Ben, Balanus myrepsica,* Offic. *Balanus myrepsica,* Ind.  
.Med. 17. *.Balanus myrepsica. Glans unguentaria, Nuae Ben, .*-Mont. Exot. 9. CommeL Plant. Ufu. 83. *Balanus myrep-  
sica, five Glans 'unguentaria.* The OILY ACORN. Ger.  
-I2I4. Emac. 54oo.. *Glans unguentaria,* C. B. Pin. 402.  
Raii Hist. 2. I738. Jons. Dendr. I3o. *Nux'unguentaria,*J. Β. I. 3I7. Chab. 24. *Nux Ben, serve Glans unguentaria.*Park. Theat. 238. *Balanus myrepsica, siliqua triangulari,  
semine minore alato,* Breyn. Prod. 2. 22. ' CommeL Flo. Mal.  
-50. . *Nux Been .Zeylanica, siliqua triangula, seminibus alatis,*Herm. Parad. Bat. Prod. 357. Cat. Hort. Lugd. Bat. 692.  
*Arbor exotica. Lentisci folio,* C. B. Pin. 399. *Moringa,* Ferr.  
Flor. Cult. 385. Tark. Theat. I65O. *Moringa Lentisci  
folio, fructu magno anguloso, in quo semine, See.* J. B. I. 435.  
Raii Hist. 2. 1745. ' Pluk. Almag. 253. *’Katumurungha,*Herm. Mus. Zeyl. 62. *Mmrringon,* Hort. Mal. 6. Ig. Tab.  
9. *Coailis, quant alii Tlapalexepatli,* &c. *vocant,* Jonsi Dendr.  
29 I. Hem. 119. *Tignum nephriticum.* Reels, in not. ib.  
*Coatl. aliis Tlapalexepatli,* Laet. Ind. Occid. 227. *Lignum  
nephriticum.* Park. Theat. I664. . Ind. Med. 68. ' Mont.  
Exot. 8. Rafi Hist. 2. I8O4. *Lignum nephrtiicum coerulea  
etstaaro tingens,* J. B. r. 492. Chain. '37. *Lignum peregri-  
num aquam coeruleam reddens,* C. B. Pin. 4I6. The BEN-  
NUT, NEPHRITIC WOOD. . \*

According to *Dale,* the *Lignum nephriticum* is' the Wood,  
and the *Balanus myrepsica* the bruit of this Tree. See NE-  
PHRIT1CUM LIGNUM. - .’ ’. .

*. Diofcorides* gives the following Account of the Virtues of  
the *Balanus Myrepsica. - . - -*

A Dram of the Powder, drank in Oxycras, consumes the  
Spleen. It is apply'd to the same Part by way os Cataplasm,  
bring mixed with Meal os Darnel ; and with Iiydrornel it  
makes a Cataplasm sor the Gout; Boil’d in Vinegar, it deter-  
ges rhe Psora and Lepra ; with Nitre, it cleanses the Alphi,  
and black Ulcers ; and in Urine, ft clears the Face of Frec-  
kles, Spots, Sun-burns, and Pimples. Drank in Hydromel,  
it excites Vomiting, and loosens the Belly, but is Very bad for  
the Stomach. The expressed Oil thereof, drank, works by  
Stool, but its Shell (φλβιὸν ἀυτῆς) is more ashingent. The  
Dregs that remain vaster Contusion and Expression, enter the  
Composition of Smegmas adapted'sor the Detersion of Asperi-  
ties andItchings. *Diofcorides, Lib.* 4. *Cap.* 16O.

’ .The *Ben,* or *Balanus Myrepsica,* is a triangular Fruit' of  
different Colours, of the Sine of a Hazel-nut, being white or  
greyish, in which is found a white Almond, of a sweet Taste,  
disagreeable enough.. . . .

. Chuse such Kenteis as are white, fresh, and' the heaviest  
you can get. They are of no other Use, that I know os, but  
to: make Oil of, which haS a great many good. Qualities. \_ The  
first is, that it has neither Taste nor Smell, and never grows .  
rancid, winch-makes it of great Use to the Perfumers and others,  
for preserving the Scents osFlowers, as Jossamin, Oranges, Tube-  
rose, and the like. With this Oil they make all their sweet  
Essences, adding to the- Flowers afore-named, as they Taney;  
Amhergrise, Mush, Civet, Benjamin, Storax, or Balsam of  
*Peru.* -They grow in *Spain, Arabia, Ethiopia,* and *India,*where-they come to Perfection, which they scarcely ever do  
*in Europe. . . . - -*

. The whole Nut isos a purging Quality, and the dry Pressing.,  
or Powder, aster, the Oss is taken out, os a cleansing and  
drying Nature; the Shelis orHufks bind extremely; the Kernels  
bruised, and drank with a little Ale, purge the Body from gross  
and thin Phlegm ; the Oil, which, is drawn out os rhe Nut,  
does the same, provokes Vomiting, and cleanses the Stomach  
of much foul Matter gather'd therein ; but the Nut itself, in  
its gross Body, does much more trouble the Stomach, unless it  
he roasted at the Fires for then they lose much os their emetic  
Quality, and only spurge downwards; and they are given in  
Clysters, with Very good’ Effect, to' cleanse the Bowels, and  
cure the Colic. The Kernels,.- taken in Poffet-drink to a  
Dram, mollify the Hardness of the Liver and Spleen. The  
Oil,, hesides its excellent Use to the Perfumers, is employ'd by  
the Glovers and-Skinners, to preserve their Leather from Spots  
or Stains, or from eVer growing mouthy,! aS thosesperfumed  
with Oil os Aimonds do. It more easily extracts,, and longer  
retains,, the Perfume of any thing infus'd in it, than any other  
Oil whatsoever. Being dropt into the Ears, it helps the Noise  
in them, and Deafness also. The Kernel, used with Vinegar  
and Nitre,- is good against the Itch, Leprosy, running Sores,  
Scabs, Pimples, and other Desedations of the Skin. Mixed  
with Meal of Orobus, and apply'dPisisterwise to the Side,' it  
helps the Spleen, and eases the Gout, and Nerves which are  
pain’d with Cramps, Spasms, Colds, and Bruises. Mix’d with  
Honey, it dissolves Nodes, Topbes, Knots, and hard Tu-  
mors. *Pomet.*

'. The Oil of the *Balams Myrepsica,* is sometimes called *Odeum  
Balaninum. ' - '*

This Fruit was termed *Glans Unguentaria,* because it yields  
an Oil bV EXoression- used **hv P.»rsnmnr«: irt nnrfumino oth-r**

Flowers grow among the Leaves, in two Clusters, on each  
Side of the Stalk, towards the Fore-part os it; each Cluster on  
a common Foot-stalk, and every Flower in a wide-moufil'd,  
five-comerfd, large Calyx, of a red Colour, being galeated  
and labiated, appearing but littie above the *Calyx,* iff the Bot-  
tom of which grow sour small oblong Seeds. The Root is  
long, stringy, and spreading much. It grows by Path-ways,  
and in Hedges, and flowers in *fuse. '*

so The Leaves and Tops are used, tho' but seldom. Dr. *Bowse*commends it aS a fingular Remedy against hysteric and hypo-  
chondriac Affections. *Mellrtis Bot. Off. p.* 285. ’

It contains a great deal of Oil half exalted, and essential and  
Volatile Salt. *Lemery des Drogues.. '*

Its Leaves are bitter, stinking, and give no Tincture os Red  
to the blue Paper, which makes us conjecture,That the natural  
Salt of the Earth is involved in it by a great deal of fetid Oil.  
Mr. *Ray* recommends a strong Decoction of it in hysterical and  
hypochondriac.Cases. Make a Tea of equal Parts os.white  
*Horehound,* stinking *Horehound,* and Betony-leaves, and drink  
every Day three or sour Cups of it, in order to prevent the  
Gout, or render its Attacks the less Violent. *Martyrsts Tour-  
nofort..*

BALNEABILIS. An Epithet for such Waters as are pro-  
per for Bathing.

BALNEA, Baths.

These have in all Ages been used with a View to Cleanli-  
ness and Decency. Hence, probably their Medicinal Virtues  
were first discover'd. And it is remarkable, that frequent Ab-  
lutions heve heen injoin'd aS a Duty, by most Religions: which  
have heen established In the east. At this Day the Orientals  
reproach the *Europeans* with Beastliness, on account of them  
neglecting to bathe; and, it must be confessed, with too much  
Reason. .

*Medea* is said to he the first who employ'd warm Baths with  
a View to Health, and this gave Rise to the Fable, that she  
heil'd People alive. 7

*Pelias,* an old King of *Thessaly,* having an Inclination to  
try whet Effects this new Medicine would have upon him,  
dy'd under the Experiment, which might add Credit to the  
Fable. ss ......

*Melampus* bath'd the Daughters of *Pratus,* in order to cure  
them of Madness. ' ’ \*

. The *Lacedemonians* immers'd their Children in Wine, as  
soon as ever they were hem, tho' they were sensible, that it.  
would make them die of Epileptic Fits, in case they were of  
a weak Constitution. . .

Those Robhers in foreign Parts, which are called *Bohemians,***a fort** of Banditti, not unlike our Gypsies, wash their Chil-  
dren, as soon as hern, in the next Fountain, to try their  
Strength. ,' .

*Virgil* says the same *os* the antient *Latins.*

*. Durum a stirpe genus, natos adflumina primum,  
Defcrimus, smvoque gelu duramus et undis.*

*Asekpiades* recommended cold Baths. *ITion Cassius, Lib.* 53.  
informs us, that *Augustus* being extremely ill, and not able to  
take Medicines, having an Aversion to them, *Antonius Musa*advis'd him to ufe cold Bathing, and to drink cold Waters  
This cur’d the Emperor; and besides other great Rewards  
from *Augustus* and the Senate, *Mufa* for this was allow'd to  
wear a Gold Ring, a Privilege none before, enjoy ’dir nless  
Men of the first Quality in *Pomes*

The same Privilege was also granted to all those os his Pro-  
fession ; and they were farther granted an Immunity from all  
Taxes for ever. ' .

But afterwards *Musca* treating *Marcellus* in the same man-  
ner, it cost that young Prince hiS Lise. And upon this Ao- ’  
count *Mufa* was censur'd, as if *Livia* had bribed him to advise,  
cold Bathing to this Prince improperly.

Those who consider what good Effects cold Baths may have  
upon People in Years, or such whose Fibres are relaxed ; and,  
on the contrary, of whet ill Consequence they may be, tn  
young People, whose Fibres are in full Elasticity, will easily  
account for the different effects *os* the cold Bath upon *Au-  
gustus* and his Nephew. si *. ‘ ‘' '.‘sir.*

*Suetonius in Augnsto, Cap.* 5o. and SI. tells us, that the  
Senate decreed *Antonius. Musia* a Statue os Brass,. and set it next'  
to that of*Alseulapius. -*

He says also, that *Augasttcs,* at his Return from his Expedi-  
tion to *Biscay,* having a Disorder in the Liver, corssCquenr to  
a long Fluxion ; *Antonius Mufa* propos'd a hazardous Remedy,  
and quite contrary to those that had been try'd, which was to  
. change ins warm Fomentations for cold ones.

*Pliny* says, that hefore the Time *os Mufa,* none but warm  
Baths were made use of ; and that *Antonius Mufa* brought cold  
ones into Credit.

*Horace* informs us, that he was forbid going to *Bai a,* by-  
*Antonius Musca,* and order'd to wash in cold Water, tho' in

Olis, and never turns rancid. It is thought proper in the Itch,  
and some other cutaneous Diseases, as being a good Detergent;  
and is sometimes mixed with Bismuth and white Precipitate.  
Some say, that this Oil, mixed with a Hazel-nut, or Filbert,  
and taken in this manner, will purge upward and downward ;  
and it is certain, thet the Fruit itself, made into an Emulsion,  
is purgative. *Geoffrey. ...*

- There is another. Species *os Ben,* which is much larger than  
the preceding. It is call'd by *Monardus,* in his History of  
Drugs, *Ben magnum, seu Avellana purgatrix,* the great *Ben,* or  
purging *Filbert.* It grows in *America,* and is brought some-  
times from *St. Domingo,* but is very scarce.

It purges upwards and downwards. The *Indians* use it for  
the Wind-colic. The Dose from half a Dram to a Dram.  
They weaken its Force by roasting it. *Lemery de Drogues.*

BALASIUS. A Gem of a purple or rosy Colour. It is a  
sort os Carbuncle. *Pulandus* relates some wonderful Effects of  
this precious Stone, which are not worth, farther Notice, be-  
cause utterly fabulous.

BALATRO, according to *Blancard,* is the same aS BAM-  
BALIO, which see.

BALAUSTIA, Balaustines. Thefe are the Flowers of **the**

*Balaustia,* Ossie. Ger. I262. Emac. I45O. *Balaustia  
Hispanica,* J. B. I. 82. Chab. 3. *Balaustia flore pleno ma-  
jore,* C. Β. Pin. 438. *Balaustium,* Mont.. Ind. 37. Aldrov.  
Dendr. 57o. - *Malus Punica fylvestrio major, sive Balaustium  
majus,* Park.Theat. I5i I. Raii Hist. 2.I463. *Balaustium majus  
sive Malus Punica selvesirio major.* Park. Parad. 43o. *Punica  
flore pleno majore,* Toum. Insh 636.. Boerh. shd. A. 2. 45o.  
*Malus Punica pleniflora,* Jonsi Dendr. 29. The BALAU-  
STINE-TREE. - . 'si

The *Balausiine* is the Flower of the wild Pomgranate, of  
which there are several Kinds ; for you meet with the white,  
the red, and the Rose-colourid. It is like the Cytinum (Flow-  
er) of the Garden Pomgranate, and . the Juice thereof is ex-  
tracted in the same manner as Hypocistis..

It is os an astringent Quality, and effectual to the same Pur-  
poses as the Hypocistis and the Cytinum. *Dioscorides,. Lib.  
I. Cap.* I 54. . E

There are two Sorts of *Balaastines* fold, the fine and **the**common : By the fine are meant the Hulks, together with their  
Flowers ; by the common, those winch heve nothing but the  
Hush. ' *Pomei.*

The *Balaustines, as* well as the *Cytines,* are of an earthy  
Nature, Very ashingent, inspissating, refrigerating, and drying ;  
whence they are Very often used for all Kinds of Fluxes, as the  
Diarrhoea, Dysentery, the Uterine Flux, and others; and for  
stopping of Haemorrhages from Wounds. *Dale* from *Schro-  
. dor-*

' BALBIS, βάλβις, is explained by *Galen* in his *Exegesis,* an  
Oblong Cavity ; hence βαλβιτῶδες, in *Hippocrates,* in ins Trea-  
*tise de Articulis,* is spoken os the Cavity at the Extremity os the .  
Humerus, to which the Ulna is articulated.

BALBUTIES. A Defect in the Speech. Properly that  
Sort os Stammering, where a Person sometimes hesitates, and  
immediately after speaks precipitately.

BALIST.E OS. The ASTRAGALUS, winch see.

. BALITISTERA. *Pulandus* explains this by *Terra Ru-  
bea. '*

BALLERUS. A small River-fish taken Notice of by.rfZ/ro-  
*vandus* and *Lemery,* which is used in Food, but has no Medi-  
cinal Virtues attributed to it.

BALLOTE.

*Marrubium nigrum Ballote,* Offic. I *Marrubium nigrum,*STINKING HOREHOUND. Ger. 566. Emac. 7OI. '  
Raii Hist. I. 57I. Mer. Pin. 75. *Marrubium nigrum, five  
Ballote,* J. R 3. 3I 8. Chab. 436. *Marrubium nigrum fee-  
tidurn Ballote dectujn.* Park. Theat. I23O. *Marrubium nigrum  
foetidum, Ballote Dioscoridis,* C. B. Pin. 23o. Hist. Oxon.  
3. 377. *Marrukiastrum,* RiVin Irr. Mon. *Ballote,* Tourn.  
Inst. I85. Elem. Bot. I53. Raii Synop. 3. 244. Boerh.  
Ind. A. I75. Rupp. Flor. Jen. I83. Dill. Cat. Giffi I35.  
Buxb. 35. *Ballote, Marrubium nigrum fxlidurn,* Merc. Bot.  
i. 23. ’ Phyt. Brit. I4. BLACK HOREHOUND.

*Ballote,* or black Horehound, shoots up from one Root in  
numerous, black, sijuare, and somewhat, hairy Stalks. The  
Leaves are like those of the common Horehound, but larger  
and rounder, black, and hairy, and set at Distances about the  
Stalk like those of the. Melistophyllum, for winch Reason some  
give it thet Name. The Flowers are white, and grow about  
the Stalk in Whorles.

Ἀ Cataplasm os the Leaves, with Salt, is os Efficacy against  
the Bite os a Dog, and, dry'd over hot Cinders till they are  
- wither'd, are good to repress a Condyloma ; and used with  
Honey, deterge soul Ulcers. *Dioscorides, Lib.* 3. *Cap.* I I 7.

The black Horehound grows better, and more branched,  
than the white, having square, hairy Stalks, and larger, darker  
Leaves, which more resemble those of dead Nettis, but are  
somewhat softer in handling, of **a** strong earthy Smell. The

the Middle of Winter ; and that the People of *Paia* com-  
plain’d of the Sick, who lest them, and expos'd their Heads  
and Stomachs to the cold Fountains at *Clusium* and *Gabii.*

*Antonius Musca* had a Brother, whose Name was *Euphorbus?*who was Physician to the second *Juba,* according to *Pliny,*and shared with the former the Credit os the Invention of cold  
Baths. *Pliny,* however, is mistaken when he tel!s us, that  
*Antemius Melfa* and *Euphorbus* were the Inventors os cold  
Baths, because they were recommended by *Asclepiades,* who  
liv'd before them.. - . .

*. Pliny, Lib.* 29. *Capos.* gives an Account of a Physician of  
*Marseilles,* whose Name was *Charrtis.* He came to fix at  
*Rame,* in the Reign or *Nero,* and made a great Fortune. He  
recommended much cold Baths in the Middle of Winter. ‘  
*r . Plutarch* in his Symposiacs, *Lib.* 8. saest. 9. gives us a  
Very 'disadvantageous Idea os the *Roman* warm Baths. He  
says, that nothing contributes so much to change the Body,  
and produce new Diseases, as the Variety of Baths that were  
in his Time made use of; by which the Body is first soften'd  
"' like Iron by Heat, and then again harden'd by dipping into  
chin Water, like Steel. Any one, says he, who had liv'd  
a few Years before us, if he . was to look into our Baths,  
would say, ' ’ ' Y E : " \*

Ἕνθα *pise its Άχί&ήα.* Περιφλεγέθων τε ῥἐουσίν

."He adds, that their Ancestors used .mild Baths, insomuch  
that *Alexander* the Great, when he had a Fever, flept.in one ;  
and the Women amongst the *Galatae* eat with their Children  
whilst they bath’d : But that in his Days, the Air that they,  
respired in Breathing, was a Mixture of Moisture ‘ and Fire;  
winch suffer'd not one Particle os the Body to be at Rest, but  
mov'd all out of their proper Situations, till they .extinguish'd  
themselves, as it were flaming *from* the Bath. : /

Baths are properly enough distinguished into *hot* and *cold ,*and both these differ extremely, ^according to the different  
Degrees of Heat and Coldness, and according to the Various  
Contents of the Waters made use ofr ’

. Baths again are Universal, that is, such as the whole Body is’  
immers'd in ; or particular, that is, such as are apply'd to some  
Parts, aS *Semicupia, Pediluvia,* .and some Sorts of Fomen-  
tations. . : . .

. It iswell known in natural Philosophy, that Heat relaxes ;  
and that Cold, on the contrary,'contracts and braces the  
Bodies it is apply'd to. This must necessarily render warm  
Baths very different, from those which are cold in their Ef-  
sects.

We sind a great deal in *Hippocrates,* with respect to **the  
Use** of Baths, both warm and cold ; and both aS Preservatives  
against; and Remedies for Distempers. But in his Treatise  
on *Regimen in acute Diseases, -* he informs us, that *Convenien-  
eies for Bathing tvere to be met with in very few Houses.*Whence *Galen* infers, that Bathing was not so universal in **the**Time os *Hippocrates,* as afterwards.

e The Uses, of Bathing in particular Distempers, according to  
*Hippocrates,* are specisy'd under then respective Articles ; mean,  
time, his general Rules are, that the Patient who uses this Re-  
medy should remain - without moving from his Place, that he  
should not speak, but allow those who either bathe him, or  
pour Water on his Head, or rub him, to perform their several  
Offices : That Sponges should be used in rubbing him, and not  
the instrument called *Strigil:* That the Patient should with.  
great Precaution guard against Cold : That the Baththould not  
he used immediately after eating or drinking; and that both  
these were also to be abstained from immediately aster coming  
out of the Bath : That it ought to be considered, whether the  
Patient used the Bath when in Health ; and if he did, whether  
. he reaped Advantage, or sustained any Injury by it : And,  
lastly, that the Bath should not he used by People who are either  
too soluble, or too costive, in them Bellies, nor by Persons who  
have not made a previous Discharge of their Excrements, nor by  
those who are too weak, who have an inclination to Vomit, a  
Nausea, or a Bleeding at the Nose. .

’ According to *Hippocrates,* the Use of the Bath is to refresh  
and moisten, to remove Weariness, to fofren the Skin and  
Joints, to provoke Urine, to dispel Heaviness of the Head,  
and to render the Nostrils and other open Ducts of the Body  
moist. He allows two Baths a Day for such Patients as have  
been accustomed to bathing during their Health.

CelsiiS *gives the following Directions with respect to Bathing.*

Bathing is useful on two Accounts; for sometimes, after **the**Fever is gone, it makes way for Health, by enabling the Pa-  
tient to use a more plentiful Diet, and richer Wines ; some-  
times it takes off the Fever itself. It is commonly advised,  
when the outer Skin wants to be relaxed, the corrupt Humours  
to be attracted from the inward Parts, and the Habit *of* the  
Body to be changed. . .

The Antients were pretty cautious in the Use of Bathing,  
*Asclepiades* more free; nor indeed is it al thing to be dreaded,  
provided it be seasonable, otherwise it is pernicious. Is a Per-  
son get rid of a Fever, so as to he free for a whole .Day, he  
may on the next, aster the usual Time of the Tit, safely ven-  
tore to bathe. But if the Fever he periodicas, so as to return  
the third or fourth Day, whenever it fads to make its usual  
Visit, Bathing may be safely used. While a Fever continues,  
if it be but gentle,, and the Patient labour under an inveterate  
Disorder os the Spleen, the Bath is a wholsome Medicine, with  
this Caution, however, that there he no Hardness or Swelling  
about the Praecordia, no Roughness of the Tongue, no Pain in  
the Head, or middle Parts of the Body, and that the Fever does  
not at the\* *same* time increase.

Τ In period seal Fevers there are two Seasons for Bathing ; one  
before the Shivering, the other after the Fever is gone ; but for  
those who have been long molested with flow Intermittents, the  
proper Time is, when the Access is entirely over, or. If that  
does not happen, at least when it is'rnitigated, and the Body in  
as good a State as can be expected in that kind of Illness.

**A** weak Person, who is to go into the Bath, must he careful,  
that he takes no Cold hesore his Entrance. When he is there,  
letJ him stop a while, and examine whether he perceives any  
Stricture about his Temples, and whether any Sweat arifes. If  
the former happens; and the other does not follow. Bathing that;  
Day will he os no Service ; but the Patient is to be gently  
anointed alloVer, and so carry ’d back, and Cold is by all rhesus  
to be avoided, and Abstinence is to he used. Is there be fro Al-  
teration at the Temples, but a Sweat breaks out, first in those  
Parts, ' and afterwards in other Places, the Mouth is to he  
fomented with hot Water, and he is then to sit in *she'Solium..*There he is also to mind whether his outer Skin shivers as the  
first Contact of the hot Water, which, though it can scarce  
happen where all things previous are right, is a certain Sign .that  
Bathing will prove of no Effect. .

' A Person may know whether Unction ought to be perform'd  
hesore or after he goes into the hot Water, by considering his  
State of Health. But generally (except in particular Instances)  
after raising a Sweat, the Body is first to be gently and through-  
ly anointed, .and afterwards to be put into the hot Water-  
And here Regard also is to be had to the Strength; for the Pa-  
tient must not he suffered to fall into a fainting Fit chrough  
Excefs of Heat; thnti’the fame is to be seasonably moderated,  
and the Body to he ‘carefully covered, with Cloaths, for its De-  
fence against cold Blasts ; and there also the Patient is to **sweat**before he takes any thing., *Celsus, Lib. so. Cap.* I7.

The preceding Directions relate only to warm Baths.

*Hoffman* has collected several Particulars relative to the Uses  
of Bathing, winch are *os too* much Importance to be omitted.

The salutary Effects produced by the external Application of-  
Water are no less .Conspicuous, than the Advantages arising  
from its internal Use. As a Proof os this, we need only direct  
our Views to Bathe, the principal Basis and most material Ingre-  
dient of winch issimpleWater; a Fluid, which, when pure, sight,  
and without any adventitious Mixture, is possessed of highly me-  
dicinal and salutary Qualities. In all Ages, rhe more sagacious  
and sitilsul Physicians seem to have been sensible of this. AC-  
cordingly *Hippocrates, Galen, Ccelius Aurelianus, Aretaus,  
Celsus,* and *Trallian,* inform us, that in their respective  
Times Baths ess sweet and pure Water were much used in **the**most Violent internal Distempers, especially in theinost formi-  
dable Disorders of the Head, fitch as racking Pains and Madness,  
whether aecompany’d with Melancholy and Dejectedness, or  
with Rage and Fury. The Antients used these Baths with un-  
common Success. And *Alexander Trallianus [Lib.* I.J affirms,  
" That **a** Bath of pure and sweet Water is of all other things  
" the best calculated for the Relief of the Melancholy ; but ’tis  
" necessary they should remain in it for in considerable time,  
" even in the Summer."

*Aretaus* approves of this Practice, and orders melancholy Pa-.  
tients to go often into Waters that are naturally hot, and re-  
main in them for a considerable time, subjoining this as a Rea-  
son, that in those labouring under Melancholy the Muscles are  
dry and tense ; and that a more proper Step cannot be taken to  
remove their Diforder, than to render them lax and soft by  
Bathing.

*Caelius Aurelianus also* warmly recommends the Use of natu-  
ral Waters in maniacal Cases.

And *Profpcr Alpinus [de Medicina AEgyptiorum]* informs us,  
that many melancholy Patients were perfectly cured by the Use  
of moderately warm Baths.

In case of Violent Pains arising from a Stone in the Kidneys,  
*Alexander Trallianus* and *Aretaus* highly recommend sitting up  
.. to the Navel in warm Bathe.

**I** myself alfo, from repeated Experience, can affinn, that in  
Violent Disorders of the Head, such as Madness, Meincholy,  
preternatural Stupidity and Torpor of Mind, disturbed Sleep,  
attended with frightful Dreams, Hemicrania, Vertigos, Dim-  
ness of Sight, Violent Tooth-ache, racking Pains of the nervous

Parts, Cardialgias, Iliac Passions, Cosis5., and Pains arising from  
the Stone in the Kidney's, Baths of the *Toplitoc. Waters,* as also  
sitting in pure Water moderately warm, have afforded instan-  
taneous Relief, even during the Paroxysm itself, and under the  
immediate Attack, of the Symptoms ; for so surprising is the  
Efficacy of Baths in alleviating Pain, and relaxing spasmodic  
Strictures, that so long as the Patients remain in them, their  
Complaints cease, and their racking Spanns are not felt; but  
makea fresh Attack when they quit them. The Antients also,  
according to *Celsos,* and the *Egyptians,* according to *Alpinus,*used Baths no less frequently and successfully in all Fevers, ex-  
hept pestilential, whether of the contioiiedor intermitting Kind,  
though they did not approve of them in the first Stages, and  
greatest Vigour, but only in the Declension of the Disease.  
And I myself, heve more than once successfully ordered emol-  
lient andmervous Baths to he used by old People labouring under.  
Quartan Fevers, on their Days of Respite. ‘

But Baths of pure and sweet Water not only soften and re-  
lax the Fibres when rigid, tense, and constricted with Spasms,  
and derive the Blond and Humours from the Head, and superior  
Pacts, to others that Are less noble and delicate, but also won-'  
dersully infist the Circulation of the Blood and Juices, and pro.,  
more cutaneous Secretion ; for by their Humidity they relax the  
Fibres and Pores of the Skin ; and by their Warmth they expand  
the, Blond, and augment the Dilatation, and consequently- the'.  
Contraction of the Heart and Arteries. Hence the Pulse is ren-  
dered fuller and quicker, and the Circulation of the Juices acce-  
lerated, by which means the Blood becoming more thin and  
fluid, is , quickly conveyed to the most remote Tubes of the.  
Body, and to all the Parts of its Surface ., and the Elimination  
Of the most subtile and noxious Sordes is promoted ; which End  
will IjeSstill, more effectsally answered, if the Patient betake  
hirr:self to Bed immediately after the Use os the Bath; because  
the Matior to he eliminated by the Pores of the Skin is re-  
strained and pent up by the’ Gravitation and Pressure of the cir-  
cumambient Water, fo long as the Patient remains in the Baths  
Bur when-this Gravitation and Pressure are removed, that is,,  
when rhe Patient comes out of the Bath, has his Body dry’d,  
and goes to Bed, fo gredt'a Quantity of Serum is discharged  
from, the opened and expanded Tubuli, that the whele Surface\*  
of the tody is sometimes covered with a plentiful, but kindly  
Sweat. . ' ” ί \*.

Besides; *Baths* and *Semicapiwns* (Half-baths) have a peculiar  
Efficacy in augmenting the Virtues, and assisting’the Operations;  
of the more *generous Medicine!,* as they are call’d, in the Curei  
of the most terrible Disorders ; for ’tis sufficiently known, that  
the drinking acidulated or other wholsome Waters for the Cure'  
ofstubhern and chronical Disorders is attended with much hap-  
pier Consequences, when Raths are used in Conjunction with  
them, than when they are drank without fuch Assistance.  
Thus the Efficacy of the *Caroline Waters,* and those of *Egra,~*especially in curing spasmodic and hypochondriac Disorders, and  
Persons whose nervous Systems are weakened and impaired, ap-  
pears more conspicuous and surprising, if after drinking them  
the Patients go into the warm Baths *osL.oplitz,* and ufe them  
in a due manner, and for a proper time; for these Waters ate  
very light, subtile, and pure, as appears both from statical Ex-'  
perimente, and from Evaporation, by which scarcely any thing  
of a folid Nature is left; *so* thet he reason of their Subtllty and  
Purity, they wonderfully penetrate into the smallest Interstices  
of the folid Parts and Fibres, which are tense and contracted ;  
and by their relaxing and emollient Nature, reduce them to  
their natural State.

Baths are of singular Efficacy in the Cure of a virulent *Lues  
Venerea,* .attended with its most formidable Symptoms, pro-  
vided the Patients go almost daily into them, and from thence,  
to Bed with a View to Sweat; but the Body must first he pre-  
pared by Venesection, Laxatives, and such Medicines as sweeten,  
the Blood, and proper Preparations of Mercury duly exhibited,:  
whether .with a View to promote-Sweat, or excite a Flux of  
the Saliva. Decoctions also of the Roots and Woods recom-  
mended for purifying the Blond in cutaneous Disorders, Pains,  
Exulcerations, and such Distempers as draw their Origin from  
an excessive Acrimony of the Juices, produce much more  
speedy and happy Effects, if Baths are used along with them.  
And indeed ’tis scarce credible what a large Quantity of thick  
Fat, and setid Sordes, is extracled from the most minute Tubuli  
of the Skin by Baths, and loft swimming in the Water. If we.  
have a Mind to prefcrihe the stronger Purgatives, or Substances  
of an acrid Nature, for exciting a Discharge of the Urine, these  
things are more safely exhibited after a previous Use of Baths.  
Though fris plain, thet the Antients performed very wonderful  
Cures in obstinate Disorders, by mearrs of white Hellebore;  
yet we find they never used that Remedy, ’till after the Patient  
had used the Bath , for by this means the Juices are not only  
rendered more fluid and moveable, and the excretory Ducts  
opened, that the peccant Matter may he eliminated with the  
greater' Ease, but the Fibres also of the folid Parts are relaxed,  
and by thet means the violent Spafins, the Strictures, and ail

the other bad Effects preduced by such a drastic and herculean  
Medicine are prevented. The Bath is also used in taking Vo-  
mits, -which, according to *Alpinus, [de Medicin. Meth.] the  
Egyptians* used every Month as a Preservative, but not except  
in a Bath.

Wben Diseases ashing from Affections of the Uterus, and  
from a Relaxation or Stricture of its Vessels, are to he cured,  
**such** as the Fluor Alhus, when Abortion is to he prevented j  
when fleshy Concretions, resembling a Polypus, or Moles, the  
frequent Causes of Abortions, are to he expell’d ; or. when the  
Menses,- flowing irregularly, are to he reduced to their natural  
and stated Periods, I always prefcrihe, and thet with the desired  
Success, the frequent Use of Baths, in Conjunction with pro-  
per internal uterine Medicines, Emmenagogtses, Ballamics, and  
Purgatives.' Preparations of Steel, especially in a liquid Form,  
as also infusions of the Peruvian Bark, or Decoctions of it in  
Wine, by their mild and balsamic Astringency, produce very  
remarkable and happy Effects by corroborating and strengthen-  
ing the Tone of the Parts in Cachekies, in inveterate intermit-  
ting Fevers, and in thatSpecies of the hypochondriac Affection,  
which draws its Origin from a Weakness of the peristaltic Mo-  
tion of the Intestines. But still these Medicines will operate'  
with more Safety and Success, if duting the Time they are used  
**the** Body is duly exercised, **or** frequently softened and relaxed  
by Bathing. The Facts **I** now memion **are** sufficiently con-  
firmed by long Experience. .

. Rut-for Baths of this Kind **we** are **not** to **use** Spring-waters,  
nor such aS are hard, heavy, or impregnated with a calcatious  
Earth but must make Choice of those that are light and sub-  
tile, of which Kind is Rain-water and River-water, especially .  
immediately aster a Fail of Rain. Those Waters are also to he  
esteem’d most proper for Bathing, which, in Washing, soonest  
take Stains out of Linen Cloths; which,, in the Preparation of  
Vidtuais, easily and thoroughly soften Roots and Pot-herbs;  
which, upon Evaporation, leave little or no Matter behind;  
and which, when pour’d hot upon Tea, or any other Substance,  
**of a like** Nature, quickly enter their Pores, and extraci these  
Virtues. But if such cannot be hed, those we can come’ *at*must he corrected and render’d soft by Art; which is most  
conveniently and effectually done by adding to them forne Lixi-  
vium, or *Venice* Soap, or by pouting into them a sufficient  
Quantity of Milk, or by mixing with them a Decoction of  
wheaten Bran, *of* the Flowers or Leaves of Chamomile, or of  
the Flowers and Roots of white Lilies. The Antients, as ap-  
pears from *Callus Aurelianus,* added Oik, and used Baths thus  
prepared, for alleviating Pains, and curing thefe Suppressions of  
Urine which proceed from spasmodic Strictures of the Sphincter  
Mofcles placed at the Orifice of -the Bladder. And emollient  
Baths made up in this manner are of singular Service for faciii-  
taring Delivery, especially in Women with their first Child, or  
such as are a llttle advanced in Years, or of a dry Constitution,  
if used in the last Months of Gestation, in the *Tabes Dorsalis*of Children, as also in the Rickets, thefe Baths are likewise of  
unspeakable Service; for they open the obstructed and con- -  
shicled Ducts, and, by rendering the nutritious Juices more  
fluid, occasion by that means a freer and more equable Distri-  
bution of them to the several Parts of the Body.

Quite different are the Effects of those natural Baths, which,,  
by reason of the chalybeate Principle they contain, are so far  
from foftening and relaxing, thet they rather brace up and  
harden the Pores of the Body. Chalybeate Waters, of mis.  
Kind, are now discover’d in a great many Parts of *Germany* j  
but those of the greatest Note are, the Waters of *FreyernualA,*in the Matquisate of *Brandenburgh ; these of Bebrda* in *Turin..  
gen* ; those of *Radeberg* these of *Laucastade in Mcijsae,* disco.  
ver’d by myself ., and those of *Eppag slum lVeissenburg* in *Franco..  
nia.* Tho’ all thefe Fountains yield a light, and subtlleWater, yet  
by reason of that most fine and sulphureous Crocus of Mars,'  
which they deposit aster standing some tone, and hy which they  
tinge, with a yellow Colour, Linen or Eggs thrown into the  
Bath, are os a somewhat astringent Taste, and may by a skil-  
ful Physician be prescrib’d internally with Success, in these Cafes  
where chalybeate Preparations are proper. But their external  
Use in Bathing is much mcjre highly extoll’d, as being of singu-  
lar Service to those who have phlegmatic Constitutions, a per-  
gious State of rhe Fibres, and small full Vessels. They are  
also of Service in Cases where, by reason of a too stow Chou- \  
lation of the Blood, the Juices are inspissated, hecome foul,  
and contract a fcorhetic Impurity, whence arise Languors,  
rheumatic Pains, Gouts, cedernatcusTumors, Contractions, and  
also inWeaknesses, and Refrigerations of the Joints ; in all whicti  
Cases these corroborating Baths are highly serviceable, by means  
of their subtile sulphureous and chalybeate Principle, by which  
they impart Strength and Elasticity to the languid Parts, and  
brace up the relax’d and weaken’d Fibres.

And tho\*, such is the Nature and Genius of these astringent  
chalybeate Baths, that they ought only to he used when tepid  
and moderately warm, since, when too. hot, they prove very  
hurtful to the Body, tsuow the Blocd into preternatural Com-

motions, excite Head-achs, and induce Languors osthe Paris;  
yet when the Patient, immediately after a tepid Bath of this  
Kind, in which the superior Part of the Water is rather cold  
than het, is said in Bed, he becomes warm, his Pulso bears  
strong, and often a plentiful Sweat is discharged from all the  
Parts os his Body, by winch his Strength is considerably in-  
creased, and the external Parts are corroborated.

. There are also artificial Baths of a more gently corroborating  
Nature, winch are made of cephalic and nervous Powders,  
boil'd in light and pure Water, and are of very smgular Effica-  
Cy. For preparing Baths os this Kind we principally make use  
of Bay-leaves, the Herb Baum, Southernwood, Marjoram,  
Origanum, wild Thyme, Thyme, Rosemary, Hyssop, Clary,  
flay'd Mint, Catmint, Penyroyal, Feverfew, and Flowers of  
common Chamomile and Rosemary ; all which put into a Bag,  
with the Addition os some Handfuls os common Salt and Pot-  
ash, are to he gently boil’d in the Water. Washing the Body  
with medicated Waters of this Kind, in R Bathing-tub, pro-  
duces Very happy and salutary Effects in Paralytic Disorders,  
Imbecillity, and Weakness of the Joints j and proves Very ser-\*  
viceable to weak, cachectic, and cold Constitutions ; and to  
old Men, who, by the Vtolenhe of Distempers, have their  
Strength impair'd, their Nerves weaken'd, and the Tone of the  
Ligaments of their Joints in some measure destroy'd. . They  
are no less remarkably heneficial in all Disorders os the Uterus,  
occasion'd by Abortion, difficult Births, or eVen Labours of  
any Kind : As also in Cases where the Compages of the Uterus  
Is drench'd with two luxuriant Humidity; or where a white  
Viscid Humour, discharged from the Pudenda, occasions Steri-  
lity. They also wonderfully promote the obstructed Menses;  
and the Haemorrhoids in Med, when stopp'd.

There are also Baths of another Kind, call'd Vapour-Baths,  
**or** *Laconic* Bathe. In these the Vapours, whether hot and dry,  
such as these exhaling from kindled Spirits os Wine; or hot  
arid moist, fuch as these arising from Herbs boil’d in Wine **or**Water, have immediate Access, either to the whole Body; or  
Ohly to some particular Parts of it. These warm Exhalations  
**are** of fingular Efficacy in promoting Sweat, opening the sub-  
cutaneous Ducts, softening the harden'd Parts, relaxing such as  
are tense and rigid, and dissolving Viscid and tenacious Humours;  
and that the Horns and hardest Bones of Animals may he  
soften'd, and render'd pliable, by means of the warm Steams of  
Water alone, is a Fact known eyen to Cooks and Druggists.  
For this Reason, Vapour-Baths are os fingular Service in cold  
Distempers, Anasarcas, oedematous Tumors, Cases where the  
Limbs are hecome paralytic, the Lues Venerea, and Swellings  
of the Testicles i They are likewise Very heneficial in repressing  
a Prolapsus either of the Uterus or Anus, and may he predat’d of  
different Materials, according to the Nature and Genius of the  
Distemper they are intended to relieve. In that terrible Species  
of Tenesmus, which generally accompanies a Dysentery, the  
" Steams *of* Milk, in which Elder-flowers have been boil’d, afford  
instantaneous Relief. Vapour-Baths of this Kind ate also use-  
shl in provoking the Hsemorrhoidal Discharge, and even necef.  
sary, in this Case, before the Application of Leeches; and,  
because they are excellentiy calculated for clearing the Mouths  
of the Uterine Veins, when block'd up with a preternatural  
Mucus, they are used with Success in Cases where the Menses  
are either entirely obstructed, or discharged in too small a  
Quantity. -

But as the most Valuable and powerful Remedies produce **the**most dismal and fatal Effects, when used unikilsully, and with-  
out Circumspection ; so the rash and unwary Use of Baths is  
Inore injurious than advantageous to the Patient. For this very  
Reason *Galen* lays down three Rules to be observed, with regard  
to Bathing: First, That those who are subject to Shivering,  
should by no means **Use** Baths. \* Secondly, That those who **have**any of their Viscera weak, or unsound, should also avoid it.  
And thirdly. That such as haye their *Primal Vlae* clogg'd and  
encumber'd with Humours, should carefully avoid it. But the  
following Rules, with regard to the Use of the Bath, are hetter  
and more explicit: In one, then, of a *Plethora,* it is to he  
removed, end the Belly is to he render'd lax, before the warm  
Bath he used ; lest, by the Heat, Congestinns of the Blond and  
Humours should he produced in the Head and Breast, and  
those Parts sustain an irreparable Injury upon that Account.

in the next Place, we are to he Very careful, lest, by **the**too great Heat of the Bath, our Bedies he so overheated, and  
as it were boil’d, as to discharge the Sweat too profusely, and  
in too large a Quantity; for this unwary Practice generally  
brings on Paintings, a Head-ach, Weariness of the whole Body,  
Torpor of Mind, Dryness of the Mouth, and Thirst, which  
if any one attempts to remove by Draughts of any cold Liquor,  
he may Very readily draw upon himself a Disorder of a still more  
- terrible Nature.

The most proper Time for using the hot Bath is the Morn-  
ing, after the Body is refresh'd with Sleep, the Concoctions  
finish'd, and the Stomach empty ; especially if proper Purgatives  
have heen preVioufly used. It is also expedient, not to plunge  
the Body all **at once into the Bath, but m immerse it gradually.**

by first introducing the Legs, then the Thighs, then the Abdo\*  
men, as sar as the *Scrobiculum Cordis,* augmenting at the same  
time, by little and little, the Heat of the Waterss Nor are we  
to remain too long in hot Baths, especially of the chalybeate  
Kind, lest by that means our Strength should he impair'd.  
Aster ufing the Bath, the Patient is to be laid in Bed, with **a**View to sweat; which Design may also he assisted by proper .  
Broths, Decoctions, or Infusions. But in natural warm Baths,  
such as those of *Wolkenstein* and *IVis.enbad* in *Meiffne,* the Pa-  
tient must often remain for some Hours, especially when **the**Disease is of a violent and obstinate Nature, arising from spas,  
inodie Constrictions of the nervous Parts, when the Mind suffers  
by means of Hypochondriacal or Hysterical Disorders, or when  
the Parts are constricted, in consequence of an excessive Rigi-  
dity of the Ligaments and Nerves.

Those who have tender Heads, who are afflicted with Ca-  
tarrhs and Coryzas, who are subject to Asthmas and Paintings,  
or who languish under flow Hectic Disorders, ought to abstain  
from all Baths, much more from Vapour-Baths, especially when  
consisting of kindled Spirits of Wine ; for these throw the Blood  
into strong Commotions, and prove very hurtful to those of  
plethoric and cacochymic Habits ; and, as Experience teaches  
us, by being imprudently used, bring on Disorders of the Head;  
Drowfiness, Apoplexies, Epilepsies; Dimness of Sight, and  
Gutta Serenas. In like manner Baths are prejudicial to People  
aster a sharp Fit of Anger ; and I myself rememher some Cases  
of this Nature, .where the Use of Baths has brought on Hectic  
Fevers, incurable Pains of the Parts, and eVen Palsies. And  
as the Colic often arises from the Bloed stagnating within the  
Coats of the Intestines, whilst it is endeavouring to find a Pas-  
sage thro\* the Veins of the Anus, and aS a Plethora often  
attends the racking Pains excited by the Stone, we are therefore,  
in these Cases, to beware of prescribing such warm Baths as  
these, which are not to be Used till the Plethora, or too great  
Fulness of the Vessels, is removed; *Hoffman. .*

*Warm Bathing* is a Very powerful Remedy in that terrible  
Disease the *Hydrophobia,* arising from the Bite of a mad Dog,  
and creating at once an insatiable Thirst, and an unaccountable  
Dread of Water. The only known Remedy, in this Case, is  
*Bathing,* winch was used by the Antients with this Very Inten-  
than. Thus *Celsus* informs us, " That with some, imme-  
\*\* diately after receiving the Bite, it was customary to plunge  
" the Patient into a Bath, and sweat him as long as his Strength  
" would pennit; taking care at the same time to open the  
" Wound, that the Poison might he the more freely discharg'd  
" from it. Then they bathe the Part affected with a large  
" Quantity of pure and unmix'd Wine, winch is esteem'd an  
" Antidote against all Poisons whatsoever.''

A Physician of *Duderstad,* some time ago, inform'd me,  
that a mad Wolf, sallying out of the Woods, bit several Per-  
sons, who died of the Bites they received: But at last, by the  
Advice and Persuasion of a common Countryman; some others,.  
who had heen bit, were prevail'd on to use a.moderately *warm  
Baths* after taking a Dose of *Fenice* Treacle, and the FunguS  
of the Dog-rose, by the daily Repetition of which they were  
freed froth Danger; for, in this Case, *warm Bathing* becomes  
serviceable, by drawing the subtile Poison to the Surface of the  
Body, and procuring it a free and uninterrupted Exit, when 'tis  
’brought thither. On this Occasion a Very considerable Diffi-  
culty may be started, which is, that with the same intention  
the Antients used *cold Baths,* which, hy bracing up the Pores,  
seem not only to prevent the Elimination Of the Poison, but to  
repel it to .the internal Parts. AS for my own Share, I am of  
Opinion, that the *cold Bath* is not, in this Cose,, to he absolutely  
condemn'd ; tho', at the same time, I look upon, it as preca-  
rious, and not to he depended upon. However, is the Use of  
the cold Bath is succeeded by an intense Heat of the internal  
Parts, accompany'd with a quick Pulse,- and profuse Sweats,  
which is often the Case, a considerable Benefit must be produced  
by it :« But if, instead of these Consequences, the Nerves should  
he distended, and render'd rigid by the Cold, 'tis attended with  
imminent Danger. *Hoffman.*

There is a Very singular Case related in *Miso. Nat. Cum  
Dec.* 2. *Ann. 6. Qbs.* 239.

**A** Woman frequentiy afflicted with an insupportable Pain of  
her Loins, having in Vain used a great Variety os Remedies for \*  
its Removal, at last sound, that nothing was so effectual for  
procuring Ease as the *warm Bath*; which having ufed for fome  
time, she began gradually to recover ; and every time she came  
out of the *Bath,* a thick unctuous Substance was sound swim-  
ming in the Water, and might have been separated from it thy  
means of a Spoon.

There is also another Very remarkable Case’ to he found in  
the above-quoted Work:

A certain Man,’ terribly afflicted with Hypochondriac Disor-  
ders, having for some time used a Sweet-water Bath, theWater  
at last began to assijme a strong and fetid Smell; and a thick  
blackish Matter was observed to swim in it. in short, the putrid  
Matter floating in the Bath, and the nauseous Smell, and acrid  
**Quality of the Water,** increasing gradually to such a Degree,^

as to vellicate the Hands of the *JPaiter,* there was a Necessity  
for a dally Supply of fresh Herbs, till the Patient was thorough-  
ly recover'd. By the same means the learned *Folckhamer* cured  
a Widow Woman, whose Bndy every Day deposited in the  
Water more than three Handfuls of a like fetid Substance;  
*Hissernan. \_*

Tho' in het Countries the frequent Use of Paths is exceed-  
ingly proper, yet they ought to be less frequently, and  
more sparingly, used in Climates where the Ain is cold and  
moist. *Hoffman.*

Mr. *Lemery,* finding one of his Patients to have all the Sy m2  
ptoms of the Small-pox, and perceiving at the same time, that  
they made no Eruption, put him into a.Bath of warm Water,  
which made them come out in great Abundance. His Inten-  
tion was to remove the Dryness and Hardness of the Skin;  
There is something *very* remarkable in this uncommon and held  
Piece of Practice. *Hist-. A.* I7II;

Mr. *Hornbcrg* advances what, to sothe; Itiay appear a Para-  
dox. That the Rheumatism may he cured by a Bath of cold  
Water, more effectually than by the warm Bath, or by Sweat-  
ing: In order to prove his Assertion, he reasons in the following  
manner.

’ The Rheumatism is produced by an *acrsd Serum.,* become so  
subtile as to make its Way thro' the Coats of the Veins, from  
which conveying itself into the Muscles, it stimulares their  
Fibres, and incommodes their Action.

in Consequence of the great Subtility of this Serum, it dis.  
fuses itself very sar, and cannot he again absorb'd by the Veins  
from which it was discharged.

The Disorder it occasions may he carried off either by pro-  
curing its total Discharge from the Body, or by forcing its Re-  
turn into the Vesseis from which it originally came.

A sufficient Heat will carry it quite out os the Bndy by  
Transpiration. A sufficient Degree of Cold will, on the other  
hand, condense it, and dispose it for entering again into the  
Veins. It is in this Case, perhaps, sufficient, that the Cold  
prevent a fresh Discharge of Serum, fince the former will  
necessarily he attenuated and dissipated ; whereas Heat, the' it  
carry off the peccant Matter, yet disposes the Veins to a fresh  
Discharge of the offending Serum. Host. A. I7IO.

- Sin *John Flayer* recommends cold Baths in the following  
Distempers:

|  |  |
| --- | --- |
| **Abortion,** | **Madness,** |
| Agues, | Melancholy, |
| Apoplexy, | Morphew, |
| Appetite lost. | Sore Mouth, |
| Asthma, | Fits of the Mother, |
| . Barrenness, | Nodes, or scirrhous Tumors. |
| Biting of mad Dogs, | Noise in the Ears, |
| Bleeding at Nose, or. | Numbness in the Limbs, |
| Bruises, | Obesity, or heing over-sat. |
| Cancers, | Obstructions ofUnne, Stool |
| Catarrhs, | and Menses, |
| Coms, | Ophthalmy, or sore Eyes, |
| Consumptions in the Begin- | Palsy of the Tongue, Lip |
| ning. | or any Member, |
| Convulsions, | Pains, Hysteric or Rheuma |
| Costiveness, | tic, or hot windy running |
| Diabetes, | Pains, |
| Dimness of Sight, | Palpitation of the Heart, |
| Deafness, | Against all Infections of thl |
| Weak Digestion, | Plague, |
| Dropsies, | Small-pox, |
| Erysipelas, or Wild-fire, | - Piles, |
| All Fluxes by Sweat, Spit- | Priapism, |
| **tings** | Quartans, |
| Fluor Albus, | Quinsies, |
| To prevent Gangrenes, | Redness of the Face, |
| Gonorrhoea, | Rickets, |
| Green-sickness, | Rheumatisms, |
| Gravel, | Ruptures, |
| Gout, | Sciatica, |
| Giddiness, | Scald Head,. |
| Head-ach, | Scurvy, |
| Heart-burning, | Stone, |
| Hectic Fevers, | Stitches, |
| Hickup, | Strangury, |
| Hoarseness, | Swell'd Veins in the Leg, |
| Jaundice, | Stiffness in the Limbs, |
| Itch, | Tetters, |
| Inflammations, | Tooth-ach, |
| . Incontinence of Urine, | Thirst, tio |
| King's-eVil, | Thrush, |
| Kidneys stops, or inflamed. .Lethargy, Leprosy, | Tympany,  Windiness in any Pars, - |

**I . To bleed and purge, and nse such proper Diet and Medi-  
cines, both hefore and after Bathing, which a rational Phy-**

fician knows to he suitable to the Disease, and the Constitn-  
tion of the Patient.

2. Not to bathe when het and sweating, but cool; not to stay  
in the Bath above two or three Minutes, as the Patient can  
easily bear it ; and to go in and out immediately, as on the  
first Bathing, after an immersion of the whole Body.

**3.** To use the cold Bath hefore Dinner, fasting ; or else in the  
Afternoon, towards Four or Five o'clock : 'Tis dangerous to  
go in after plentiful Drinking and Eating.

I. Continue to bathe nine or ten times, at least two or three  
times in a Week.

5. To use Sweating, with Cold Bathing, in Palsies and Ric-  
kets, and several Diseases affecting the Nerves, with Obstru-  
ctions.

6. in Windiness; or Siziness of the Humours, or their Flatu-  
lency, no Sweating is necessary ; nor 'where Bathing is used  
for Preservation of Health, or the invigorating of the Animal  
Spirits,

That we may conceive a right Notion of the mechanical  
Action of Baths on the Body, I shall give Dr. *IViainwrighfs*Dissertation on this Subject, as it is Very distinct, and has the  
Appearance of Truth to recommend it. -

*Sanctorius* telis us. That Swimming in cold Water hinders  
perspiration: And, - ' -

That the Flux of the Belly is chred by promoting Perspira-  
tion, that is, by warm *Bathing t*

*c* Thet Hypochondriacal Persons are much eased, if their  
Bodies be render'd perspirable by frequent *Bathing :* And,  
That Washing with cold Water heats robust Bodies, and  
refrigerates weak ones: And,

Warm *Bathing,* unless Crudities withstand, helps Perspira-  
tion, and refrigerates the internal Bowels.

*Bathing* hath heen often used with Success in the Scab, the  
.Leprosy, Elephantiasis, and most Desedations of the Skin. In  
Variety of Pains, as Chronical Rheumatisms, Gout, Sciatica,  
Lameness, from either too great Contraction or Relaxation **of**the Tendons.

I sent a Gentiewoman to St. *Mongatists* Well, who was  
cured of an oedematous Tumor in her Ankle by *Bathing,*which would not yield to any Method that had been used, aS  
Plaisters, discussive Fomentations, with Sal Ammoniac dissolv'd  
in them. Tinctures of Myrrh and Camphire, Oil of Tartar  
*per Deliquium,* laced stockings, *etc.* She *bathed* her whole -  
Body once a Day, to give a general Contraction and Tensity to  
all the Vesseis, and promote a Dissolution and hetter Circula-  
tion to all the Humours; but *bathed* her swell'd Leg several  
times every Day, and kept it not too long in the Water at a  
time, for fear os chining it ; so thet the Vibrations of the Fi-  
bres heing made stronger and quicker so often in a Day, the  
obstructing Matter was removed, and the Vesseis enabled to  
resist the distending Power os fresh Humours.

**I** am persuaded, that a prudent Management of the cold  
*Bath* would be Very powerful in the Relief of Cachectic and  
Hydropic People, provided the Distampers he not too sar ad-  
vanced ; and some dangerous Symptoms in a Consumption, if  
the Lungs he sound, would hetter he removed this way than .  
any other: But this is not to he attempted, without-the Advice  
of some judicious Physician. 'Tis a Specific in the Rickets.  
Haemorrhages, whether from the Nose, Guts, or Uterus, are  
not only stopp'd by cold *Bathing, Sat* the Return prevented.  
Nothing more -certainly gives Ease, and effectually promotes the  
passing of Stones in a Nephritic Fit, than warm *Bathing.* And  
*Baglivi* telis us, that *Dolor Colicus fore sempcr miteseit in Send..  
cupio,* Colic Pains are almost always relieved in a *Semicapiunt.*

*Bathing* will always act the Part of a Diuretic. And plung-  
ing over the Head in cold Water, especially in Sea-water, will  
do more in the Cure os Melancholy, Madness, and particularly  
**os** that occasioned by the Bite of a mad Dog, than any other  
Medicine. There is nothing more adapted to the Cure os Fri-  
gidity, when owing to a former Excess of Venery, than the  
ColdBusA

It will also contribute its Share to the Cure both of a simple  
*Gonorrhoea,* and *Fluor Albus.* 'Tis often successful in a Palsy;  
and they who use it much are Very littie affected with the  
Change os Weather : And yet the Abuse os Bathing is very pre-  
judicial; for Bath-guides are generally of a pale and ghastly  
Countenance, of a bloated Habit os Body, with ulcerated and  
swell'd Legs, winch often end in a Dropsy.

. Tho' *Bathing* hath been used with Advantage in all'the Cases  
**I** have mention’d, yet there is scarce any of them all, but, in  
some Circumstances, it would be prejudicial : So that, to reap  
the best Advantage we can by reading the History of Cures per-  
form'd by it,. it is fit we should inquire, whet Alterations are  
made by it in a human Body, that so we may know in what  
Conditions to order it, and what not.

**Our** Bedies are press'd upon by a Weight of Ain, when the  
Mercury stands highest in the Barometer, equal to 39900  
Pounds Troy. Now, if this Weight he either considerably in-  
**creased or lessen'd, as 'tis often upon the** Change of Weather,

and the Influence of the Planets, it will certainly make a great  
Alteration in the Fluids of our Bodies. But this Pressure is  
never so much augmented as when we bathe ourselves: For  
Water, being above 8oo times heavier than Ain, must necesse-  
wily greatly increase the Pressure: And a Body, sunk 35 Feet in  
Water, sustains double theWeight it does in the Ain ; and the',  
**when we are** near the Top, the Pressure upon our Bodies is  
mightily lessen’d, yet 'tis much greater than in the open Air;  
**so** that all the Consequents of a greater Pressure will happen  
upon Bathing.

The tender Fibrilhe, of which the Skin is composed, heing  
unequal in Strength and Tensity, some of them will more resist  
the Pressure of the Water than others ; from whence proceeds  
that Rugosity of the Skin upon Bathing. /Tis certain, that  
the Surface of the Body, and chofe Parts adjoining to it, will  
he the most and first compress'd, .and those at the Centre the  
least and latest; so that the Blood will he forced, in great Plen-  
ty, upon the Viscera, where there is the least Resistances For  
this Reason, it is never safe for thole to bathe who have weak  
or ulcerated Bowels; nor can they, without Danger os Life, or  
Swooning at least, who have a Very weak Pulse, enter into a  
cold Bath. The fourth Aphorism is only accounted for this  
- way, that is. *That cold Bathing heats robust Bodies, and refri-  
gcrates weak ones;* For the Contraction of the Heart, in robust  
Bedies, being strong, makes the greater Conflict with the Re-  
sistance it meets with, in promoting the Circulation of the  
Blood, in such -as enter the cold Bath, whereby the Blond is  
more broken, and the hot Particles set at Liberty. On the  
contrary, in those who are weak," the Contraction os the Heart  
is but just able to continue the Blood in its Circulation, which  
will, by reason os the Resistance it meets with, be flower than  
before; and therefore they will have a Sense of Cold, or he  
refrigerated.

One that goes into a cold Bath, is he plunge hot himfelf  
over Head, is subject to the Head-ach : The Reason of this is  
plain from what I have observed hefore; for there being the  
least Resistance to the circulating Blood in the TIead, winch is  
press'd upon only by the Weight of the Ads, it will run in such  
Plenty thither, as to distend the Vessels beyond their usual  
Tone, and thereby occasion a Sense of Pain. And why People  
are so chearful, brisk, .and lively aster Bathing, is not only  
.hecause the perspirable Matter is thrown off more plentifully,  
(according *to.SanctoriusIs* Observations, that is. *Melancholy is  
overcome ley st free Perspiration*; and *Chearfulnes.s, without an  
’evident Causa, proceeds from Perspiration succeeding wellj* but  
also from a Sense .of less Weight upon the Body. A Person  
two Feet under Water (as they often are who use Bathing)  
sustains a Weight of Water, added to that of Air, (supposing still  
the Area of his Skin to he equal to 15 square Feet) equal to  
228O Pounds ; for, 2, the Number of cubical Feet of Water,  
pressing upon a Foot square of the Skin X 76, the Number of  
Pounds in a cubical Foot of Water is n= I52, x I5, the sup-  
posed Numher of square Feet on the Surface of the Body is  
imr 2280 Pounds Troy.

So that the first and most obvious Consequence of Bathing  
is, by a greater Pressure upon our Bedies, to straiten the Vessels,  
and therebydiflblve the Humours, and make them sitter to pass  
the Glands to be evacuated ; as also to squeeze Ont any Viscid  
obstructing Matter, that sticks to the Sides of the Vessels, and  
.render the Motion of the Fluids of our Bodies more free and  
easy, in the next Place, they who enter into the Bath have  
the Quantity of their Blond mightily increased in the Brain and  
Viscera, being forced thither, where there is the least Resist-  
-ance; and the Quantity of separated Matter in any Gland  
being as the Quantity of Blond multiply'd into its Celerity, at  
the respective Glands, theQuantity of Animal Spirits, ofUrine,  
of Gall, Succus Pancreatis, *etc.* will he mightily increased, and  
any Impediment to the Secretion of these Fluids, will probably  
be removed, these Liquors flowing with a greater Celerity. So  
that,

I. If we would have the Blood dissolved;

2. Or any viscid Matter, adhering to the Sides of **theVes-**seis, removed;

3. Or the Glands scour'd ;

4. Or a greater Quantity of Spirits generated, and moved  
with greater Celerity thro’ the Nerves;

5. Or would force the U rine;

**6.** Or .remove Obstructions in the Liver, Spleen, Pancreas,  
and Mesentery, if they he not grown too obstinate (in which  
Case 'tis dangerous); we ought to order Bathing.

\* It is for the first, second, and third Reason, that it cures  
: the Itch, Leprosy, and Elephantiasis: It is for the fourth Rea-

son, together with the former, that it cures the Palsy, Melon-.  
choly. Madness, and the Bite of a mad Dog: It is for the fifth,  
that it helps the Passage of Gravel: For the sixth, join'd with  
the other, that it helps Cachectic, Icteric, and Hydropic Peo-

. ple, before the Distempers be too far advanced-

These Ends,’ which are com pasted by a greater Pressure, are  
more effectually obtained by whatever increases the Weight  
of the Water, or contracts the Fibres of our Rodim ; **it is the**

Salt in the Sea Water whereby its Weight is increased, that  
makes it more useful in the Cure of those who are hit by a  
mad Dog; and the deeper you plunge them, the more effectual  
it will be, for a Reason that I have given hefore.

We know by Experience, that Cold contracts; and the  
more fuddenly it is applied to our Bodies, the.;nore violently it  
operates; but how much it contributes to the obtaining’ os the  
forementioned Ends, we cannot certainly know, having no  
Rule by which we may measure the Contraction caused by it.

But, that it is very considerable, we need not doubt, having  
so many Experiments to prove it. The Contraction of the  
Fibres is propagated throughout the whole Body, upon which  
score all the Humours in the Body must be propelled with greater  
Force through the Veffeis in which they circulate ; besides that  
theTensity of the Fibres heing greater, their Vibration will both  
he quicker and stronger, and that in proportion to their increased  
Tensity; fo that the Blood and Spirits will not only move  
snore swiftly through the Canals, but also he extremely ground  
and broken; from whence all the effects of more fluid Blood and  
Spirits, moving with greater Velocity, will necessarily ensue upon  
using the cold Bath. These things which I have said, com-  
pared with the Constitution of the Patient, to whom Bathing  
is prescribed, will give you the Time he ought to stay in  
it, the Numher of Times (with the Intervals between them)  
he ought to use it, the necessary Preparations for it, and whet  
is to be done after it.

It is upon the Account of the contracting Power of the cold  
Bath principally, that it stops Haemorrhages, Gonorrhoeas, and  
the Fluor AlbuS, as alfo that it cures Venereal Iinpotencyi

Where the peccant Matter hath heen made more fluxil,  
either by Medicines, Diet, or a regular Use os the warm or  
temperate Bath, in chronical Rheumatisms, Gout, Sciatica,  
Lameness, *etc.* the Violent contracting Power of the cold Bath  
will often perfect the Cure. A nervous Atrophy, winch *Ba.,  
glivi* probably conjectures to he owing to an universal Relaxa-  
tion of the Nerves, which terminate in the Skin, is as likely to  
yield to the cold Bath as any other Method, provided the Pores,  
by Contraction, were not shut up too suddenly ; for it would  
then throw the detained Matter upon some other Glands,  
whereby an Evacuation more dangerous might succeed.

... The next Property of the Bath, distinct from its Weight,  
and Coldness, depends upon its heing moist; and by this Qua-  
lity of the Water, it softens, relaxes, and makes pliable all .  
the Parts Of our Body, as fussicientiy appears by steeping  
any Part of ah animal Body in Water; even the Horns and  
Hooss os Beasts will become soft and flexible, by a long Immer-  
sion in Water, especially if warm.

, And that Water, as moist, hath a Property of relaxing, as  
’tis proved by Experiment, so 'tis no way inconsistant with  
what I have said of the Pressure of Water in general, nor the  
Contracting Force of the cold Bath in particular. The Pressure  
. of the Water is consistent enough with relaxing and softening  
of Bedies that are immersed in it; for the Weight os the Wa-  
ter will enable it to infinuate itself into the Pores *os* the im-  
mersed Body, whereby it will become more soft and flexible;  
and yet, before it hath done this, will force together the Sides  
of any yielding Vestel, such as those of a human Body are,  
and thereby press out their Contents with a Velocity pro-  
portionable to the Weight incumbent on them ; so that, after  
**the** Humours have heen put in Violent Motion by the Pressure  
of Bath Water, if the Person stay any considerable time in,  
: he will have the solid Parts of his Body softened, relaxed, and  
made flexible. This Hint is of great Use to determine the  
. Time our Patients ought to stay in the Bath in some Distempers  
more than others.

Now I shall inquire howthe contracting Power osCold, and **the**relaxing Power of Moisture, can agree in the same Subject. That  
they cannot act intensely at the same time, but their Actions  
will destroy the Effect one of another, is evident to any who  
consider, that contrary Qualities are inconsistent in the same  
Subject at the same time; bus, as! observed in the last Section,  
Moisture acts Very flowly, and must he a long time in perform-  
ing its Work, whereas Cold acts quickly, and on a sudden, as **we**know by a Multitude os Experiments: Wherefore, though **the**cold Bath may contract at first, yet by staying too long in it,  
it would relax ; hut there are none who are able to bear the '  
Cold so long as to produce the latter Effect. The principal  
Reason why Cold so Violently contracts the Membranes of our  
Bodies, is thy making anlungratesul Sensation ; for such is the  
Frame and Constitution of the Animal (Economy, that the  
Soul has a Power of contracting, or relaxing, the Membranes  
and Vessels of the Body, so as best to serve the Purposes of  
Life; and though we know not how the Soul operates upon  
: the Body, yet would it he the greatest Folly to deny that which  
we daily experience to be true. We every Day observe, by  
the Command of our Wilis, that the Memhers *os* our Bodies  
are moved a thousand different ways; and 'tis as easy to ima-  
gine the Soul acts immediately upon the Nerves, and other solid  
Parts of the Body, aS upon the Animal Spirits, being that Spi-  
**fit can act as easily upon** solid Matter, as that whicn is fluid.

*.s* the Mode of its operating being altogether unknown to ns. In  
a relaxed State the Body is weak, feeble and Imactive, and in  
this Condition it is, in all the Passions which are attended with  
Pleasure: On the contrary, whatever Passions os the Mind are

- attended with Pain, Griess or any kind of Uneasiness, as Ma-  
lice, Revenge, Fear, a Fright, or Surprize, put the whole  
Bod)’ into a contracted State, as appears by the Shrinking of **the**Veins, Sparkling os the Eyes, Contraction of the Pupil, Pale-  
ness of the Face, and especially os the Lips; and this is none  
*of* the meanest Displays of infinite Wisdom and Goodness, sor  
the Preservation os Man: For by this means he is strongest  
when he has the most Occasion for it, either in resisting Force  
when he thinks he can overcome it, or else in flying from it ;  
in doing of which upon a Fright, some have exerted such Agi-  
lity of Body as is almost past Credit, were it not the common  
Observation of Mankind, how Vigorous and active we are in  
such Circumstances. The Reason of this excessive" Strength,  
when the Vessels os the Body are contracted, is evident from  
Dr. *Cheyne’s* Proposition about the Strength os Animals, that is,  
" That 'tis in a triplicate Proportion to the Quantity os Blood  
" running in the Vessels." Now the Quantity of Blond is  
mightily increased, in the Proportion it bears to' its Veffeis,  
when they are contracted, to what it is when relaxed ; for 'tis  
the same thing to all Intents and Purposes, whether the Veffeis  
continue os the same Wideness, and the Quantity of Blond  
he increased, or the Quantity of Blood continue the same,,  
and the Vessels in which it runs be straitened or con-  
tracted ; so that we may expect the same Strength in an Ani-  
mal whofe Vessels are contracted to half their Wideness- as  
we may from an Animal whose Veffeis are in their former  
Condition, and the Quantity of his Blood doubled; so that  
besides the Advantages common to all Sorts of Bathing, there  
is this peculiar in the cold Bath, that it gives a violent and  
universal Contraction to all the Membranes and Veffeis of the  
Body, and there is nothing fo surprising in the siidden Cures it  
performs, but what is accountable for from this Cause.

But Water hath certainly a softening, relaxing Property,  
when applied to our Bodies; and by means of this 'tis able to  
bring about great Alterations; and as the Pressure of the Water  
is made more effectual by Cold, so is its relaxing Power by a  
moderate Warmth : For a gentie Heat always relaxes the Fi-  
bres of our Body, by bring pleasing and agreeable to the Sense  
of Feeling: So that when we would have the Benefit os an  
universal Relaxation, we ought to go into the temperate Bath,  
such as *Buxton,* being the most temperate of any that I  
’ know of in *England.* The first Advantage that many receive  
from the Use of this Bath, is an entire Refreshment after Wea-  
riness with a Journey. ’Tis a common Custom for Persons  
wearied with Riding, as soon as they alight, to go into the  
Bath for a little time, by. which means they hecome as lively  
and brisk as they were in the Morning; for Weariness heing  
nothing but an overstretching, or too great a Tensity, of the  
Fibres, occasioned by usmg them too long, or too Violentiy,  
must, upon their heing relaxed, go off again f 'Tis for the  
’ same Reason that Sleep takes off Weariness.

This universal Relaxation caused by Bathing will fo widen  
the Pores, that a Vast Quantity of perspirable Matter will he  
carried off, more than at another time. 'Trs sor this Reason,  
that some corpulent People have, in a Fortnight's time, lost  
above two Stone Weight by using of this Bath; and all the  
Advantages os a free Perspiration may he gained this way ; tho'  
it be true, we are more obnoxious to catch Cold afterwards :  
Yet I think a cautious Use of the cold Bath after the hot, might  
not only prevent that Inconveniency, but, in many Cases, ren-  
der it much more beneficial. I have known that Bath I am  
speaking os, to remove Violent Pains in the Head, Back, and  
Joints. A Gentieman of my Acquaintance had a fixed Pain  
in his Breast for almost two Years, and was relieved by four or  
five times Bathing in this Bath. It helps a chronical Rheu-  
matism, Gout, and the Colic, Lameness, Contraction of the  
' Tendons, *etc.* and how all these are performed, is easily known

by the foregoing Theory. But, all the effects of warm Bath-  
ing are better brought about by the Water insinuating itself  
into the Body through the Skm; for being mixed with the  
Blood, it dilutes and diflolves the acid Salts in the Serum, by  
which they are hetter carried off through the proper Glands **de-**signed for their Evacuation: So that 'tis useful in all Distem-  
pers where too much Salt abounds, as the Scurvy, and most  
cutaneous Diseases.

Though it he a generally received Notion, that Bath Water  
enters into the Body, and so mixes itself with the Blood, yet  
most believe it upon very indifferent Grounds, or having never.  
examined the Reason of the Thing, nor considered the Ob- -  
sections against it. That Water hath a wonderful Power of insi-  
nuating itself into any contiguous Body, appears from several  
Experiments. We see how Deal Boards will swell against rainy-  
Weather; the watery Particles floating in the Ajr, by the Pres-  
sure of the Air upon them, are forced into the stender Tubes  
of the Wood, where they meet with no Resistance, the Parti-  
cles of Air bring too large to enter the same. It is certain.

however spue the contrary may appear to he, that the com-  
pounding Particles of Water are less than those of Air, because  
the former will pass through several Bodies that the other will  
not. It will force itself through the Skins of Animals, **even**after they are dried, and converted into Leather. *Bellini* tried  
the Experiment upon the Skin os a Manis Head, winch, after **it**was moderately dried, he suspended with a Stone in it, to sink  
it in the Water, and in a few Hours time the Water had sorced  
its Passage through it. But nothing shews more the Force of  
Water to enter into contiguous Bedies than the following Expe-  
nment.

Fasten a Piece of Whip-cord, or a strong Rope, of whet  
Length you please, (but the lunger, the inore visible will **the**Experiment he) to a Hook or Staple, and at the Bottom of **the**Cord hang any Weight, short of what will break it, though  
never so great; you will find, that the Weight will rise in moist  
Weather, and sink lower in the dry: You may also raise the  
Weight by moistening the Sides os the Cord by a wet Sponge ;  
by tins means a few Particles of Water may overcome any finite  
Resistance, if the Cord would bear it. Now, fince there is but  
a littie Quantity of Water, and that driven into the Sides of  
the Cord, with a Forice no greater than the Weight of a Cy-  
linder of Air incumhent upon the Water; therefore must the  
Water act by some Property whereby its Force is greatly aug-  
mented, and that can he no other than that of the *Cuneus ;*find the Forces os Wedges are to one another reciprocally pro-  
portional to the Angles their Edges make; but in Spheres the  
greater or lesser Degree of Curvity is to be considered as their  
Angles; when Spheres are considered as Wedges, and the Der  
grees of Curvity in Spheres are reciprocally as their Radii. Now  
the Panicles os Water, heing *fa* infinitely small, less by much  
than those os Air, must, when acting as Wedges, have their  
Powers infinitely increased, so as to overcome any finite Re-  
sistance: Now let the Resistance the Water meets with, in  
entering into our Bodies, he whet it will, yet 'tis hard to he-  
sieve it is greater than what I heve mentioned, which yet a lit-  
tie Quantity Of Water will overcome. The Experiments **I**have taken Notice of were made upon the Skins os dead Men,  
or Beasts, which would have put the Matter heyond Dispute,  
had they been made upon such aS were alive. The only Differ-  
ence then heing, that, in the Living, Steams or Vapours are  
constantiy raised into the Air, through the Pores of the Skin,  
in insensible Perspiration, which is not so in those that arc  
Dead, these Vapours, though raised with a considerable  
Force, are yet unable to withstand the Impetus, with which  
Water endeavours to insinuate itself into contiguous Bedies,  
heing so great as I have explained. And though the Quantity  
of perspirable Matter is very great in twenty-four Hours,  
heing five Eighths of the Meat and Drink a Man takes in a  
Day ; yet, is we compute the Quantity that perspires from any  
Part Os the Skin, in a given Time, we shall find it too littie  
by far to hinder the Entrance of Water into the Body, when we  
go into a Bath. For Dr. *Pitcairn* hath demonstrated, that the  
Matter of insensible Perspiration in a Minute, is the I2OO Part  
of the Place it comes from, that is, one Scruple of the Skin  
perspires Ἀο Part of a Scruple in a Minute, and consequent-  
ly one Dram of the Skin perfpines jA,e Part of a Dram in a  
Minute. Now, suppose a square inch of the Skin weigh one  
Dram, then a square Inch perspires 1A3 Part of a Dram in **a**Minute; but a square Inch of the Skin is pressed upon by **a**Weight when we bathe, more than in the open Air, equal Io  
ninety-six Drams. For we may conclude, that our Bodies,  
taking one Partwithanother, are two Feet underWater when **we**bathe ourselves; so that every square Inch of our Skin must bear  
the Weight of twenty-four cubical inches of Water equal **to**inety-six Drams; for a cubical Inch ofWater being four Drams  
throwing away the Fraction, twenty-four cubical inches  
must be ninety-six Drams. Now since only the j Part, of  
a Dram of Matter is perspired through a square Inch of the  
Skin in a Minute, therefore is the Elevation of the perspirable  
Matter resisted by a Weight II52O0 times greater than itself;  
for I20O x 96 = II52oo. How great then must he the Co-  
lerity with which the perspirable Matter moves, if we imagine  
it able to raise a Body I i520o times heavier than itself? Thus  
would it he, if the whose Quantity of perspirable Matter, eva-  
cuated in a Minute, was to exert its Force at once upon the  
incumhent Weight of Water; but it is fo sar from doing that,  
that if the Exhalation of the Steams he not continual, aS the  
Pressure of the Water is, yet the intervals hetwixt the Times  
they are propeU'd from the Body are Very short; suppose sixty  
of them in a Minute, heing about the Numher of Pusses that  
a healthful Man's Artery heats in the same time ; then will the  
Quantity of Vapour, which exerts its Force at once against  
the incumhent Water, he sixty times less than what I first  
assigned ; winch bring multiplied by I2oo= 72OOO, the Num-  
ber of Parts into winch a Dram os perspirable Matter .is di-  
vided, one Part only- of which exerts its Force against ninety-  
six Drams os Water in a Second ; so that the perspirable Mat-  
ter that rises, every Second must raise a Weight 69I2OOO  
**times greater than itself, if it resist the Entrance of the incum-**

**Lent Water ὁ for hinety, the Number of Drains of Water,**incumbent upon an Inch square on the Skin, multiplied by  
72OOO, the Number of Parts into which a Dram of perspira-  
. hie Matter is divided, is =6912000, the Differed oe between  
**the** Quantity of Matter perspired in a Second, and the Quan-  
tity of Water by which its Motion is resisted.

I think by this time it sufficiently appears, that the Bath  
-Water will mix itself with the Humours of rhe Body; so that  
there is nothing so wonderful in Bathing, but what may he ace  
counted for from some of these Properties of Water I have  
mentioned, without having recourse to the Salta with which  
Bath Waters are impregnated, which yet may contribute their  
Share in the Cure of some Distempers. What I have said  
about Bathing, as 'tis mostly new, so are my Reasons founded  
upon known Experiments ; and hew just my Inferences from  
them are, I leave to the Judgment of my Reader (supposing  
**him to** have the necessary Qualifications, and a moderate At-  
tention) to determine. *liAinwright.*

Dr. *lViainwright* has left me Very little to say On the Subject  
of Bathing. I shall only farther remark, with respect to cold  
Bathing, that as Cold contracts the Vesseis of the Body, the  
Solids act with more Vigour upon the Fluids, which contributes  
to the Attenuation of the latter; the Attrition hetwixt the  
Solids and Fluids is also increased, and thence a Person seek  
himself warm, when he comes out of a cold Batin . in Con-  
sequence also of an increased Action of the SolidS upon the  
Fluids, the Circulation is accelerated, and for this Reason all  
the Secretions are increased, amongst which are Sweat, Perspi-  
ration ,and Urine. 4

But in order to the Production of these salutary Effects, we  
must suppose a certain Degree of Elasticity, or Power of Con-  
traction in the Animal Fibres ; otherwise, the cold Water will  
- refrigerate, and consequently coagulate in some Degree **the**juices, without adding any new Force to the SolidS, in order  
**to** promote their Attenuation. Hence, in Coses attended with ‘  
a certain Degree of Relaxation and Debility, a cold Bath should l  
**seem** to he certain Death. ?

I believe all Physicians, who attend any considerable Num- -’  
her os Patients, frequently hear some of. them complain of  
erratic Pains about the Breast, which reside in the Muscles,  
though I have sometimes known them mistaken so saras to he’  
**esteemed** internal, and consider'd as proceeding from the Lungs;,  
**and** it is possible, that a Sensation of Weight on the Breast,..  
**and** a certain Difficulty of Breathing, the' in a small Degree,  
may have laid the Foundation for this Error. I take the Li-  
berty of recommending, in these Cases,, from my own Expe-  
rience, the cold Bath, as the most effectual Remedy I am ac-  
xprainted with. It should he used about every other Day, for  
**a** few Weeks ; and the Patient should only just irnmerse him-  
self under Water, and immediately come out again, and repeat  
\* this two or three times. When the Disorder s removed, the

Remedy should be laid aside. And indeed, in all Cases, great.  
Care should he taken not to make the cold Bath so habitual, as  
to render its continual Use absolutely necessary. This Caution .  
Is of equal Force with respect to all Remedies of Importance,  
especially Opium, and the Bark, by the incautious and unne-  
ceflarily continued Use of which, many Constitutions have been  
Utterly destroyed. . .. :

Lastly, it has been remarked, that in Disorders of the Lungs,,  
where there iSA Tendency to a Consumption, cold Bathing is.  
noxious, as it accelerates the Inflammation of the Tuhercles .  
formed in the Lungs, and the consequent Suppuration.

*JVillis,* in his Treatise on a Pbrenitis, gives a Very remarkable  
Case of a Girl who was cur'd of this Distemper by Immersion  
into cold Water, winch deserves to he taken Notice of. .

Some time ago, says he, I was called to the Relief of a ro-.  
bust and Vigorous Servant Maid, who heing seized with a FeVer,  
became so furious and mad, that there was a Necessity for keep-.  
Ing her continually bound in Bed. I.took a large Quantity of.  
Bloed from her at two different times, rendered her Body.  
soluble by repeated Clysters, and prescribed her such other Re-  
medies aS are usually exhibited in Cafes of a like Nature. **I**. also ordered, that she should have Juleps, Emulsions, and  
hypnotic Draughts. But all these were of little or no Service  
to her; for she remain'd without Sleep, and Very furious, for  
the Space of seven or eight Days, crying and roaring incessant-  
ly for some cold Liquor to drink; for which Reason. **she was**allowed as much Water as she pleased ; but was neither ren-  
dered more calm, nor less thirsty, by that means.- AS It was  
the Summer-time, I ordered her to he taken up in **the** Mid-  
dle of the Night by Women, and carried to **a** Boas, where  
her Cloaths being taken off, and the Cords, with which **she** was  
bound, untied, she was plunged in a deep River, having previ-  
ously tied a Rope about the Tnmk of her Boby, lest she should  
- happen to he drowned. But there was no Occasion for this  
Expedient; for the Girl naturally swimmed with so much Dex-  
terity, that a Man who is very expert in that Exercise, could  
have scarce acted his Part better. About twenty or fifteen  
Minutes after, she was taken out of the Water, .soher and in  
her Senses. Upon which, heing laid in Bed, she steps, fell in-

th a plentiful Sweat, and was thoroughly recovered without **the**Use of any Other Remedy whatever. This Cure fudceeded fry  
happily, and so snddenly, because the Excesses of the vital and  
animal Heat, which were both highly increased at one and **the**same time, were removed by-a Remedy proper for intense and  
burning Heats, that is, numeration and Refrigeration by  
Water. *JVillis de Delirio et Phrenitide.*

. In Confirmation Of the Truth of this History, I must relate  
one winch was told me by the late Sin *John Floyer,* and a Lady  
of Honour and Veracity, who was a more immediate Witness  
of the Fact than Sir *John,* though he attended the Woman,  
whose Case is the Subject of this History.

Sir *John* was called -to a Farmer's Wife at a Village about  
four Miles from *Lichfield,* who was ill of' a Fever, attended'  
with a Delirium, and an utter Privation of Sleep. It happen-  
ed one Night, that the Patient lay for a littie time pretty still,  
and the Nurse took that Opportunity of going softly out of  
the Room for a few Minutes, upon some necessary Occasion.  
When she return'd, she sound all still and quiet, and sat down  
by the Bed-side for at least a quarter of an Hour; but obserV-  
ing, that she did not hear the Woman breathe, she put back  
the Curtains, suspecting she was dead ; but was much surprised  
to find she was not in Bed. After searching the Room to no  
Purpose, she alarmed the People in the House, who, after  
some time, found the Woman in the Yard up to the Chin in  
Water, in the Well, which was, aS is usual in that Country, .  
not much above five Feet deep, and near full of Water.  
The Woman was instantly taken out, and put to’ Bed,  
and immediately sell afleep. Soon after, a prosuse Sweat broke  
out, which continued for many Hours. She awaked without  
any Delirium, and recovered without any farther Trouble..  
; The Chymists have applied the Word BALNEUM to several  
things relative to their Art. Thus the old Chymists mention a  
τ - BALNEUM AREN.dE, or Sand Heat, for the Purificax  
tion of Mercury. ‘

. BALNEUM MARLE, or MARIS, as it is sometimes  
written, imports the Heat os boiling Water. In this enchei-  
resis, the Vessel Containing the Ingredients to he distilled, di-  
gested, or acted upon, is put into a Vessel of Water, which in  
made so boil; so that no greater a Heat than that of boiling  
Water, can be communicated to the Substance to be treated,  
ὲ It is customary with the Chymists to give grand and sounding -  
Names to all the Instruments used; and Phenomena occurring,  
in their Art. Thus *Explosion,* with the Vulgar, is, with them,;  
*Fulmination*; and the Heat of boiling Water, is *The Bath of  
the Blessed Virgin Mary.*

BALNEUM SICCUM, or a dry Bath, is, when Sand,  
Ashes, or Filings of Steel, are heated, and the Vessel, contain-  
ing the Substances to he acted upon, is placed therein.

ἐ BALNEUM VAPORIS, a Vapour Bath, imports the Heat  
of the Vapour, or Steam of Water.

As some Account of the *Bath* Waters may be expected from  
me under this Article, I shall give itin the Words of Dr. *Cheyne,*because it is much the most distinct I have met with.

*Of* **BATH WATERS.**

.The Learned have been divided, and much perplexed, about  
the Heat of *Bath* Waters. I have always endeavour'd to ac-'-count to myself for it, from the common Experiment of'mix-  
ing Filings of Steel, and Powder of Sulphur, working them  
into a Paste with Water, and putting them into a Collar, tin-  
der a Cock, dropping Water flowly and regularly; the Paste  
will ferment to such a Degree, that the Water running'from  
it shall he of the same Heat and Virtue with the *Bath* Waters,'  
though not sir pleasant, nor so well fitted to human Bodies.  
This is a common Experiment, and these are the only natural  
Bedies known, which, meeting together, wifl produce Heat in

. Water, without artificial Fires. *Tournefort* says, " 'Tis certain,  
. " that Filings of Iron, steep'd in common Water, will grow  
. " considerably warm, and much more so in Sea Water i And l

" if you mingle therewith some Sulphur powdered, you will  
". see this Mixture really burn." Sir *Isaac Nnntonsusu* his  
last Edition of his *Optics, p.* 354. says, ." That eVen the gross '  
" Body of Sulphur powdered, and with an equal Weight of'  
" iron Filings, and a little Water made into a Paste, acts Up-  
" on the Iron; and in five or she Houts grows too hot' to be '  
" touched, and emits a Flame." That the Heat of the *Bath*Waters is owing to a Principle within themselves, is evident, i  
from their retaining it longer than any other Water, heated to  
the same Degree, will. Wherefore there can he no Necessity  
of having recourse to Vulcanos, or subterraneous Fires, to ac-  
count for this Appearance. There are no burning Mountains  
known in this our Northern Climate; and 'tis pretty hard to  
conceive, how Fites should have burned so long under Ground  
without a Vent, or any other remarkable Sign. The Sulphur  
in the *Bath* Waters is evident to the Senses, swimming in large.  
Clusters on the Tops os the Baths mined with Earth, and some  
mineral Substances, wherewith the Guides commonly gild Silver j  
and is found an excellent Remedy in Scurvies, Leprosies, Ring-  
worms, and other Foulness of the Skin. The Steel is manifested

hy.the bluish Tincture given to the Water from the Tump, by  
an Infusion of Nut-gall. It is true, this Tmctiire is neither  
so deep, nor is it to be had from the Water, in any short nine  
after it comes hot from the Pump, thereby to manifest any great  
Quantity of Steel in the Composition, stich as can have the full  
Proportion to the Experiment now mentioned. But, to set this  
in a clearer Light, let us put together thofe Considerations:  
First, thet upon Distillation of *Bath* Water, there remains  
little in the Bottom of the Giais but the common Calx, or Sea.  
Sain, thet is found in the Distillation of Spring Water, if  
we except some Sand or Earth, that is forced up by the Vio-  
lence of rhe Pump; wherefore the *Bath* Waters not being im-  
pregnated with any Quantity of a saline Mixture, can retain  
nothing in their own proper Substance hist the lightest  
Parts of the Steel and Sulphur. Secondly, that this Wa-  
ter is as fully impregnated with Sulphur, as it an hear.  
And thet there must he a greater Proportion of Steel in  
*Bath* Water than is manifested to the Senses, or discovered by  
any Experiment hitherto made, is evident from its healing Est  
sects, which no known Medicine but Steel can bring aheut, or  
account for. None but those who have feen it, can helieve  
the wonderful Efficacy it has, in most chronical Cases, Whet  
hut Steel, in a sew Weeks, can make the Blood, from a white  
bluish, or tallow Hue, resisting the Knife, like Glow, swain,  
ming in its Serum, like an Island amidst the Ocean, look all  
of a Piece, of a scarlet Colour, and a due Proportion hetween  
its nourishing and 'its watery Parts ? Nothing but Steel can  
make a pale ash-colouredCountenance, hollow and deep Eyes,  
no Appetite, little Strength, and less Sleep, eat and drink, and  
steep, look gay and sicek, like the heft Health. Thousands of  
such Instances may he seen every Season at these healthful Springs.  
Thirdly, the Effeci *of* Solphut in bridling the feofrble Ap-  
pearances and Operations of most active Medicines, is very  
well known. Instances of which, in natural Bodies, are Anti-  
mony, and Native Cinnabar; in artificial ones, AEthiops Mine-  
mi, and Cinnabar of Antimony; rin all which the Mercury is  
so bridled up by the Sulphur, that none of their sensible Opera-  
tions and Appearances are felt, while they produce the most  
wonderful Changes on Animal Bodies.

Since the *Bath Wntess* derive their Heat from a Principle  
within themselves ; since no natural Body, but Sulphur and.  
Iron, can produce such a Degree of Heat, as is in them; since  
Doming but Steel can produce those wonderful Cures on hu-  
man Bodies, which *Bath* Waters do; since Sulphur will lock  
up and bridle the feofrble Appearances and Effects of the most  
**active** Bodies, and yet not destroy their healthful and medicinal  
Virtues; it is plain, thet *Bath* Waters must owe their Heat to  
**a** Mixture of steely and sulphureous Particles, and their health-  
ful Effects to a greater Proportion of Steel, than is feofrble,  
or easily discoverable by any Experiment hitherto made, join’d  
to a light Sulphur, whofe Virtues and Efficacy in all chronical  
Cases we have already shewn. The Mountains which sur-  
round the Place, which every bedy now knows to. he but the  
N ests of Minerals, and the Receptacles of the Waters, which.  
seed the Springs, (which Mountains are continued **even to the**Sea) confirm this Opinion.

. All hot Waters seem chiefly to consist of these two Principles,  
and to differ only as the Sulphur or Steel predominates in them.  
Where the Sulphur predominates, they are hotter, more nau-  
seous, and more purgative. Of the. three hot *European* Wa-  
tors of Note, the *Aix la Chapelle, Bourbon,* and *Bath, the*first abounds more eminently in Sulphur, which makes its Heat,  
Naufeoufnefs, and purgative Faculty, fo great, thet few weak  
Stomachs can hear its Heat and Nauseoufnefs, and fewer weak  
Constitutions the Violence of its Purging. The *Bourbon* are  
of a middle Ntaure between the *Aix la Chapelle* and the *Bath*Waters, and are less hot, nauseous, and purgative, than the  
*Aix la Chapelle,* but more than the *Bath* Waters. The *Bath*partake less of the Sulphur, and more of the Stool, than either  
of these two, and are by far the most pleasant, of a milky.'  
Taste, never purge, except they he drank cither too fast, or in  
too great Quantities, and always mend the Appetite, and raise  
the Spirits. The weakest hot Waters are but of little Use,  
except, in the lowest Cases, and hectic or consumptive Consti-  
tutions; but, for Medicinal Ufes, the weaker hot Waters may-  
be made pretty neat equal to the stronger by Evaporation, aS'  
to the sulphureous Principle; as the stronger may he brought  
down to the weaker by Dilution, as I have experienced, tho’

. Nature he always the wisest and most persedt Operator. But  
neither the same Proportion of Steel, nor Sulphur, nor Heat,  
indifferently fit all Constitutions. Generally the Strength (thet  
is, the Quantity of Steel and Sulphur) of the same hot Waters,  
is in proportion to their Heat., and therefore, to fit the same  
Waters to weaker Constitutions, they nced only he drank pro-  
portionably cooler.

The *Bath* Waters having such an Origin, and such Quali-;

. ties, must nceds be an excellent Remedy in the Gout, and  
other chronical Cases, for thofe Reasons: (I.) Because of their  
Warmth, Just suited to the Wants of Nature, and a little above  
**the Heat of human Bodies, sufficient to introduce a foreign**

Warmth and Motion to cold and decayed Bowels and Fluids;  
whereby the natural Warmth, and flow Circulation, is increased  
and enlivened: (2.) This, with its agreeable Taste, and-milky  
Softness, makes it sit fo easily on the Stomach, and become fo  
excellent a Vchicle, to wash into the Blood other proper and  
fpeoisic Medicines .without thet Nauseousness, and Fret on the  
Spirits, which all other hot Waters, hitherto known, or that  
Chilliness and Damp, which all cold Mineral Waters give,  
whereby they are rendered useless or hurtful in some low and  
nervous Cases. To thofe add, (3J Their chalybeate Principle,  
so peculiarly locked up in Sulphur, that the Patient reaps all  
the Benefit, and heaithsul Effects, of the best Preparations of  
thisMedicine, (and whet are not two such powerful Medicines,  
combined, able ,to effmir?) without the nauseous Taste, and  
frequent Disorders upon the Stomach, that every other way of  
giving Steel produces. (4.) The Sulphur, united with the Steel,  
makes it a natural, kind of Soap, for cleansing the insides of  
Vessels from the Fouiness thet Oeaves to them, and for open-  
ing the Obstructions of the final! Vesicis. But, (5.) That  
which, together with the others, makes it specific in the Gout,  
is, its relaxing Quality, whereby it softens and supples the  
rigid and stiff fibres, sir as the gouty Humours may pass freely  
by Perspiration. Much more might he sard of this wonderful  
Remedy provided by the Hand of Nature, to relieve the Mi-  
series of human Life; but this the innumerable'Crouds of  
Cripples *of* all Sorts, and thofe other Persons made miserable  
by chronical Distempers, sent thence every Year, cured or re-.  
sieved, do witness more convinningly, than either Philosophy *or*Rhetoric can. .

It is capable of Demonstration, thet the Force, Pressure,  
and Weight of the Rath Waters in Bathing, are sufficient to  
counteract the Force of the Perspiration fome Millions of times ;  
and consequently, that these Waters, relaxing the Fibres of all  
the Vessels, and soaking through the Scarf-skin, and even throl-  
the Coats of the finall Vessels, are introduced into the finalleft  
Glands, and convey’d by the retuming Veins into the Mass'  
of the Blond, and, by the Force of the Circulation, assist in-  
opening Obstructions through the whole Habit; and this ac-.  
counts for the wonderful Efficacy of Bathing in white Swellings,  
Palsies, scorbutic Drynesses of the Skin, fcrophelous Sores and  
Tumors, nervous Wastings ***of the*** Limbs, sciatical Pains of the  
Joints, cold Rheumatisins, and Weaknesses after the Gout.  
.And this still will he more evident, if the Doctsine of the At-  
traction of Animal Bodies on the incumbent Atmosphere, late-  
ly so much improv’d he Dr. *James Keil,-* he fuppofed true. It  
is many Years since I was informed by a Gentleman of great  
Ingenuity, thet having a good deal of Money on a Horse,'  
which was to run for the Piate at *Naw-market,* and the Rider  
dying not many Days before rhe Time appointed for the Course,  
he had undertaken- to ride himself, and was obliged by Fasting,  
Watching, and Exercise, to bring down bis Body to Horse-  
man’s. Weight ; that after the Match was over, and he exactly  
weighed at the Post, he had rode immediately home, and have-  
ing drank up ia Pint of Chicken Broth only, which might weigh  
about a Pound, got to Bed, and stept twelve Hours; and  
weighing again under the same Circumstances as before, sound  
he had got in the Whole about three- Pounds, if Γ remember  
right; whereby he conduced, that bis exhausted Body had  
drawn in about two Pounds of the circumambient Air. This  
more manifestly shews, how **the** *Bath* Waters, heing **her,**and consequently more active, may he drawn in, and get thro\*  
the Pores of the Skin into the Blood-vessels, and there concur’  
with what is drank down towards thofe kindly Effects Bath-  
ing commonly produces. And ’tis impossible to account for  
thofe copious and profuse Sweats Persons (if they lie long in  
Bed after Bathing) run into, but that their Bodies are filled,  
with these Waters, like a soaked Sponge. But the Weak and  
Low-spirited are never to he suffered to mn into those; which  
are prevented, by either not going into, or by being only a  
short time in Bed.

It is somewhat uncommon, that Bathing, which' for many’  
hundred Years has wrought fuch Cures, as we have on Record,  
and singly maintain’d so Iong: the Credit and Reputation of  
*Bath,* should for this last Century (in which onlv drinking the  
Waters has been, in Use) have fallen- into such Disgrace, that  
it is very far from heing now the chief thing People come to  
*Bath sor.* Before drinking’ the *Bailr'Wo.ta:* came to he so  
much used, fixed or wandering. Pain, Stiffness, or Contractions  
on the Tendons, Lameness, or wasted Limbs, Palsies, or Rheu-  
matisms, were the chief Distempers People came to *Bath* for.  
.But now, since all other chronicaf Distempers whatsoever, are  
relieved either.by bathing or- drinking, if People will bathe in-  
differently; without Advice, witltout duly preparing their Bo-  
dies, and oleansing the alimentary Passages, without any di-  
standi Knowledge of their Cafe, their Strength, the proper Sea-  
son of Bathing, or the Tube they ought to stay in at once;  
there must’ necessarily happen (as there have happen’d) un-  
lucky Accidents, which tend to discourage and disgrace Bath-  
ing in general.- On the other hand, if thofe who attend on  
Bathing will undertake ***more*** than,they can manage, or duly

' tend.

lend, at one time; some must necessarily he kept in longer than  
**their** Strength will suffer, or their Case requires. Thefe heve  
heen the Sources os the late Neglect and Contempt of Bath-  
ing. But I am well satisfy'd, was Bathing managed prudently  
and discreetly, there are but sew chronical Cases, in which it  
might not he useful, and in which it might not contribute with  
Drinking, and other proper Remedies, towards a Cure, or a  
Relies. If, on the one Side, we do but consider of whet **Use**and Reputation hot Bathing was amongst the antient *Ramans,*and to whet extravagant Expences they ran to make their Baths  
convenient, or beautiful: Is we consider, that most chronical  
Distempers are attended with want of due Perspiration, and  
are therefore generally of the cold and phlegmatic Kind, and  
**are** always produced by Obstructions from sizy Juices : On **the**other hand, if we reflect on whet was hinted above, "that the  
hot Water, in Bathing, was sucked in, and attracted through  
the Skin, into the returning Veins, and was thereby put in a  
Capacity to assist with what is drank down, to wash off Ob-  
ftructinns of the small Vessels, to thin and dilute the Blood,  
and glandular Juices, towarm, enliven, actuate, and nourish,  
the wasted and decayed Parts; We shall readily conclude, that  
Bathing, prudentiy managed, may be extremely beneficial in-  
**most** chronical Distempers. That Bathing therefore may he  
performed in the best manner possible, we must first distinguish  
those Distempers which might foster by it, from those which  
will be benefited by it. And those are chiefly of three Kinds:  
(I.) Those Distempers which impair the rational Faculties, or  
affect the Head 'with Pain or Giddiness. Because hot Bathing  
might send Fumes or Vapours upwards, and so increase these  
Distempers; such are hysteric Disorders, Convulsioris, Epi-  
sscpsies, and the like. While the Fit lasts, a Vertigo, or Head-

ach, from a soul Stomach. (2.) Those which any ways affect'  
the Lungs, because hot Bathing, increasing the Velocity of the  
Bloed, may occasion a Pleurisy; or Peripneumonia, or a Spitting  
of Bloed in such Coses. (3.) Those which are attended with  
Inflammations, moveable Tumors, or with flitting Pains, fuch  
as the Gout, or an inflammatory Rheumatism; hecause hot  
Bathing Inay increase the first, or tranilate the latter. These  
excepted, I know no chronicah Case (but when in their last -  
Extremities) which might not lib benefited by moderate and dis-  
creet Bathing, which might scour the foul Tubes, open the  
obstructed ones, increase the natural Heat, and encourage a due  
Perspiration. I shall conclude with subjoining a general Rule,  
whereby to know, if, on Trial, Bathing‘^agrees, and has not  
heen continu’d too long in the Whole, or each single Time ;  
that is, if it neither sink the Spirits, waste the Strength, nor  
weaken - the Appetite, then it is certainly beneficial; for hot.  
Bathing heing of the Class *os EvacuantS, is* it carry nothing  
**off** but faulty Humours, it can produce, none of the mention-  
**ed** Effects ; and if it evacuate these, it must needs be henefi-  
dial; and, on the contrary, if it spend the nourishing Juices,  
and carry off more than the Party can well spare, it must he  
Hurtful. ’ . '

. It is observable, from Gindot'S.Experiments on *Bath* Waters,  
That the Water, either exposed to the common and open Air,  
or cork'd up and seal'd in a Bottle, did, for a much longer ..  
time, retain its Virtue of tincturing a purplish Blue with Nut-  
gall in clear frosty Weather, than in heavy moist Weather;  
that is., it retain'd its chalybeate Principle much longer in frosty  
arid clear Weather, than in warm and moist Weather. The  
Troth is, nobody could heve heen long,at *Bath* but must have  
observed, that the Water succeeded better, quicken'd theAppe- .  
tlte more, made the Digestions stronger, and raised the Spirits. .  
higher, in a clear, quick, dry Season, than in moist, warm,  
heavy Weather; and, in Fact, in such a Season as this first is/  
they suspass all the Methods of producing such an Effect I have  
over seen.. .To which two Causes concur, the greater Quantity'  
of a subtile^ active, chalybeate Principle preserved in theWa-  
ter, and. the. greater Tightness and Firmness produced in the  
Fibres by the cold, clean, dry Weather: But what I would  
chiefly observe from the mention'd Experiments is, that the  
chalybeate Principle is so fine, subtile, and active, that, in a sew

- Hours, nay Minutes, it will evaporate thro' a Cork, and seal'd,  
Glass-hettie;- and may retain,Sy the mere Action of **the**circhrnambient Ain, its Nisre, and different Gravity, for some  
considerable Time: Which shews, how this so subtile and vola-  
tile a chalybeate Medicine may he convey'd from the Stomach,,  
eyen to the great and complicated Distance of the most minute  
Nerve, the most readily and quickly; which the elementary  
Water, thus’ actuated, reaches much sooner than any artificial  
Preparation of Steel possibly can; and thereby becomes so ad-v  
mirable a Medicine in relax'd NerVes, and nervous Distempers ;  
to which *Bath* Waters, actuated by this subtile, penetrating,,  
arid powerful chalybeate Principle, concur inwardly ins drinking  
them, and outwardly in Bathing, by then being drawn in thro'  
the Skin, into the small Veffeis, aS may he seen in the precede-  
ing Articles about Bathing. As to the small Quantity of Steel  
thus introduced, it seems generally sufficient for the real Wants.  
os Nature; but, in chronical Diseases, may be easily fupply'th  
by larger Doses of artificial Steel, when the other has prepared"

**the way: And** certainly, in giving both Steel and Bitters, 'tis  
safest, and most prudent, to begin low, and with smaller Doses,  
and to rise as the Pulfe and Strength rises, and as Usage has  
made smaller Doses less effectual. I remember to hate observ'd  
in some os the great and sagacious Dr. *Radclijffus* Bills, four or  
five Drops of *Mynsichrs* Tincture of Steel, with a sew DrogS  
of Elixir Proprietatis, in a simple Water, prescribed aS **a** chary-  
beate Bitter, even to grown Persons. This I freely own, Iri  
the Novitiate of my Observations, I thought very simple: I  
heve had good Reason to condemn my rash Judgment since,  
and to acknowledge’it prudent and judicious to hegin, in some  
low Cases, with fuch small Doses. - '

The other Difficulty is, how the same hot Water should  
relax contracted Fibres, as in the Gout and Rheumatism, and  
yet contract and brace relax'd Fibres, as in the Palsy and wasted  
Limbs. That the Matter of Fact is so, is past all doubt,, in  
these and many other Cases of Contraction and Relaxation:  
But to clear up this, we need only ro consider what Contraction  
and Relaxation are. Since all the Fluids of the Body are con-  
Join'd in Vessels, Contraction can afise from nothing but from  
theBlood, and other Fluids, (or whatever is the Cause of mus-  
cular Motion) their being retain'd and obstructed by their Sizi-  
ness; or from some external Injury in the Substance of the  
Muscle itself, whereby it becomes fuller and firmer, and so  
acts aS upon its Office of Contraction. Relaxation, on the  
other hand, is an Obstruction os the Nerves or Vessels os the  
Fluids, hefore they arrive at the’Muscles, as is seen in Palsies,  
and the nervous Atrophy os the Limbs ; so that, in both Cases,  
Obstructions are the Cause both of Contraction and Relaxation. ,  
Wherefore, whatever Medicine can diflolve the Siziness of the  
Fluids, open the Obstructions of the small Vessels, make tho  
Perspiration full and free, and brace the Fibres, will hothoonsi  
tract Relaxations, and relax Contractions; and that these are  
some of the Effects os *Bath* Waters, has, I think, been made  
sufficiently appear.

If it be inquired into, what other Cases, besides the Gout,  
*Bath* Waters may he useful in, the Answer will be obvious from  
the Account now laid down ; that is. That they must be bene- .  
ficial in all Coses, where Steel or Sulphur is ; that is, in almost  
all chronical Cases whatsoever. In acute and inflammatory  
Cases, in all Capes attended with a strong quick Pulse, **no**mineral Water, nor chalybeate Medicine, can be proper; but in -  
all other Cases (excepting those only attended with a Bleeding  
or Haemorrhage) they are not only safe,- hot exceedingly bene-  
ficial: More particularly, their wonderful Efficacy has been.  
Often experienced in Cachexies, Scurvies ; in the Stone, Rheu-  
matism, .and Jaundice; in Hypochondriacal and Hysterica!  
Affections; in Vapours and Melancholy; in Palsies, Epilepsies,  
and other Cephalic and Nervous Distempers ; in Disorders of  
the Stomach and Bowels ; Obstructions of the Liver and Gall-  
bladder ; in Green and Breeding Sickness; in Barrenness, and  
Weakness after Child-birth ; in Obstructions of the monthly  
Purgations, and all other peculiar Diseases of the Sex. And  
truly, if a Person afflicted with a low, broken, or tender Con-  
stitution, suffering under the tedious Pains and inquietudes of  
any of the lingering Distempers now mention’d, where **the**Viscera or Bowels are yet sound, would know the fittest Place \*  
in *Britain* to spend their Life-time with the greatest Ease and  
Pleasure; take all the Advantages of the Place together, **the**Agreeableness of the Waters to the Stomach, the Certainty of  
their procuring ^ good Appetite, when it fails; and the no less  
Certain Consequence thereupon. Freedom and ChearfulnesS of  
Spirits ; the regular Way of Living; the Excellency os the  
Provisions; the Warmness, Cleanness, and Neatness of the  
Housing; theConyeniency of the free, fresh, and open Air of  
the neighbouring Downs for exercise ; the Easiness of the  
Amusements; and the Advantage of what Conversation one  
desires; I say, taking all these Advantages together, I can  
affirm, from near twenty Years Experience, without Suspicion  
Of Flattery, or Fear of Contradiction, that *Bath* is the Place.

Some wise and frugal People think the mere Drinking of  
these Waters, for some Time, without taking any Medicine,  
either before or with them, may he sufficient to remove any'  
of the chronical Ails they are good for; but those, is they are  
really ill in any other manner, except there Loss of Appetite,  
are generally convinced, upon Trial, at their own Exhence,  
that they neither ought to begin a Course of the *Baih* Waters, ,  
without a previous Cleansing os the Stomach and Bowels, lest’  
they wash into the Blood thro' the Lacteals, by the perpetual.  
Dilution of the Bathwaters, those Impurities which constant-  
ly cleave to them ; nor that they ought to expect a perfect Cure  
of a long-breeding and lingering Distemper, without the.Assist-  
anee of thofe other Medicines which are reckon'd specific in;  
the Cofe, and Io which the *Bath* Waters are so pleasant and  
so assistant a Vehicle: For it is but Prudence to bring all the  
Forces one can raise, against so potent and so formidable ah  
Enemy as a chronical Distemper.

. It is not Possible to lay down "a general Rule, about **the**Quantity of Bath Waters which it is convenient to drink daily,  
that heing- to be varied according to some Circiifnstanoes os **the**

Patient, and the Nature of the Distemper. Strong, full, **and**large Bodies, hear more Water than tender, thin, and Jester  
ones ; the Younger more than the Elder; thofe of strong and  
firm, than those of weak and relax’d Nerves; thofe who labour  
under the Gravel and Rheumatism, than thofe who are disor-  
demi in the Alimentary Passages, or are subject to fcorburic or  
nervous Weaknesses, and the like. But, in general, it were to  
he wish’d, that People, who come to *Bath* for their Healths,  
drank less daily then they commonly do, and allow’d more  
Time for a chronical Distemper. I think it may be safely  
advanced, that any Quantity greater than an *Englisa* Quart in  
a Morning, drank in two Hours nine, half a Pint every half  
Hout, is more than whet is reasonable: For, drinking in this  
Proportion all the rest of the Day, at Meais, that is, in the  
Afternoon, and going to Bed, they must take down no less then  
five Pounds in about sixteen Houts, *via.* two Pounds in the  
Morning, a Pint and an half with Wine at Dinner, half a  
Pound in the Afternoon, and as much at Supper, and at going  
to Bed. This, every body must fee, is fully sufficient to answer  
.. all the Intentions of drinking mineral Waters. A greater

Quantity than this will serve only to distend and relax the Ali-  
mentary Passages, to force its Way thro’ the largest and most  
Ϊ' atent Tubes, and to propagate the Circulation through the  
stanches and Inosculations of the linger Arteries and Veins,  
where the least Fouinefs, and fewest Obstructions, can happen;  
fo that it will scarce ever reach the finest Caplllary Vessels, in  
which alone the Danger lies. And the late ingenious and  
learned DI. *James Keil* has made it evident, that the most ex-  
peditious way of altering the whole Mass of the Blood, by  
mineral Waters, is by small and frequent Draughts, in most  
Cases a Pint in a Morning is sufficient ; and in low Constitu-  
tions, and Disorders in the Alimentary Passages, tending to  
Vomiting and Purging, half a Pint is enough and whatever  
Quantity is to he drank, ’tis always hest to take it in small  
Quantities, and at good Distances, provided it come within the  
Compass of the Morning. What is drank at Meais, tho’ cold,  
yet being fresh, and not altogether drain’d of its Principles and  
Virtues, contributes near as much to the Cure, as that which  
is taken in the Morning, dine Afternoon and Evening’s  
Draughts are more arbitrary, and must depend upon the Ob-  
servation of the Patient, aS he finds them agreeable to his Sto-  
mach, and sit easily or not: Where *too* great Quantities have  
not been swallow’d down in a Morning, they are very proper,  
provided they be in proportion to the Morning’s Quantity, and  
never taken under sour or five Houts after Dinner; and that at  
Night, not under two or three Houts aster Supper these times  
heing the most proper to assist the Digestion, and carry off the  
Remains of the Fond. But the Truth is, as nothing is more  
necessary in a Course of thefe Waters than setting out right at  
first ; fo nothing requires more the Experience and Judgment  
of a Physician, than the accommodatiog the previous Prepara-  
tions, the Quantities to be drank, and rhe Medicines to he  
taken with them, to the Distemper, and the Constitution of the  
Patient , sor, thefe once settled, the rest generally goes on suc-  
cessfully. " .

It is equally impossible to determine the most proper Season  
for drinking *Bath* Waters, as it is to detcrmine the most proba-  
ble Seafon for falling ill of a chronical Distemper: Generally  
speaking, most chronical Diseases rage Spring and Fall, and  
Custom has made these Months Seasons for the *Bath*; but the  
Waters are ever the fame, no real Alteration having ever been  
observed in them from Times or Seatons ; tho’ there may be  
some little Variation of their sensible Qualities, from the Varia-  
tion of the Air and Weather. In the hottest Weather they  
are given off for a Month sometimes, by thofe thet have drank  
them a long time before; but a great many, especially those of  
the tender Sort, and of cold Constitutions, feel the best Effects  
from them in thet very Month: And with fome they are best  
in the coldest Weather, supplying then the Inclemency of the  
Air by their kindly Warmth ; and passing best, when the .Fi-  
bres are wound up and shorten’d by the outward Cold, where-  
by the Circulation becomes brisker and stronger. So that  
Custom and Conveniency, arising from outward Circumstances,  
have made Seasons for the *Bath,* more than the Nature of the  
Waters themfelves, or their Fitness to produce their benign  
Effects. The Length of Time People ought to drink the Wa-  
ters is as little to he determin’d as the most proper Season, or  
as the Duration of a chronical Distemper; If they are of the  
Nature of an alterative Medicine, (as they most certainly are)  
they are to be continued till they either disagree, or the chroni-  
cal Distemper ceafes; And this hist generally requires a Time in  
Proportion to the Inveteracy and Obstinacy of the Disease:  
Hereditary Sharpnesses require more Time than acquired ones ;  
slighter Degrees of the farne Case, less than more inveterate  
ones; nervous Distempers more than those confin’d to the  
Blood. A Lady of a low, hysteric, and weak Constitution,  
having ash’d the famous Dr. *Sydenham,* (as the mid me) How  
long she might safely take Steel; bis Answer was. That she ’  
might fafely take it for thirty Years, and then begin again, if  
**she** contioued ill. The Question might he as proper, if in

had been ash’d. How long time one might continue to eat and  
drink ; for, in Lowness and Disorder, if Remedies he necessary.  
Nature will as fafely admit them, as Hunger will safely admit  
of Food. I very well know, thet Remedies, in chronica!  
Distempers, must he changed, when they become familiar, and  
heve no Effecti; as the same kind of Food ought to he chang’d,  
when it hecomes nauseous and disgustful. But then, this helongs  
not to the Question proposed, which supposes the Waters have  
not abated of their first Benefit and Relief, but rather increase  
in them, and do better; and, on this Supposition, there can he  
no doubt, that they may be fafely continued till a pcrfedi Cure  
is obtain’d, or they fail in their Relief. Some have drank them  
several Years with Advantage ; and many cannot live, and be  
well, without them, as is evident from the constant Residing  
of several Families here for their Use. Whilst the original Dir-'  
order lasts in any Degree, and the Waters continue to relieve  
it, they may be used ; but in all Cases, and Events, it is safest  
and best to let *Well* alone.

It has been alleged, that the *Bath* Waters, drank too long,  
dispose People to Fevers, and inflammatory Distempers, by  
over-enriching, heating, and exalting the Blood ; But this Ob-  
jection lies equally against all generous Foods, and enlivening  
Medicines. And, indeed, Temperance and Moderation, in  
every thing necessary for the Support of Life, is best and safest ;  
And, as I just now said, it is best always to let *Woll* alone; hut  
as long as a chronical Distemper is yet unconquer’d, and unre-  
medied, there can be no Hazard of over-enriching the Blond,  
the very Case supposing the quite contrary, *viz.* that there are  
remaining Siziness and Sharpness in the Blood and Juices ; So  
that, while the original Distemper continues, this Effeci is not  
to he fear’d ; and, when it is conquer’d, the Patient is verv. in-  
disereet, that, out of mere Wanronness, would play with any  
Medicine whatever. But this is rhe Case of a very sew, and, if  
ever I have met with any such, I have always religiously advised  
them to abstain from Waters, add every thing else, that can he  
call’d Medicinal, ike'this Reafon, amongst many others, that  
it made a very useful Remedy become less effectual, when..  
wanted, by heing made more familiar. But the Truth is,  
most of the chronical Distempers, for the Cure of which *Bath*Waters are recommended, are of the colder Kind, where  
the Blood is sizy, poor, and dispirited; and, whilst any Re-  
mains of the Distemper last, ovet-eliriching or exulting is little \_  
to be fear’d; and when they happen, are easily remedied by  
Bleeding, low Diet, and a few cooling Purges. *Cheyndi  
Account of the Hiature and Quality sso* Bath *Waters. .*

BALOIOS, Βαλιίος, as *Galen* writes it; Or Βἀκεως, as it  
occurs in the seventh Book of the Epidemics of *Hippocrates,'*where it either signifies *a Man ofValcea,* a City of *Macedtrnia,*or is the Name of the Person whose Case is there related.

BALSAMATIO, Embalming.

BALSAMELAEON. The fame as the *Balsamum eIAecba.*

See BALsAMUM.'

BALSAMELLA, according to *Blancard,* is the fame a&  
*Ealfamina. .... . .*

BALSAMICA, Balsamics; that is. Balsamic Medicines,,  
of which *Hoffman* gives the ensuing Account:

*Balsamic* Medicines are of a Nature somewhat hot and acrid.  
Under mis Denomination come what we commonly call cepha-  
sic, nervous, apoplectic, and antiparalytio Medicines; as also  
spirituous Cordials, and other Substances of similar Natures  
and Qualities: But, of all the Medicines belonging to thesin/-'  
*famic* Class, these are the most noted and efficacious, Aloes-  
wood, together with its Resin and Essence; yellow Sanders,  
with its Essence, reduced to a liquid Balsam; Arnhergrise;  
Liquid Amber; Balm of Gilead; Amber; Benzoin; Storax,  
with its Resin ; the Ladaniferous Shrub, with its Resin; the  
Balsams of *Pera* and *Tolu* Balsam of Capivi; and thet call’d  
the red *American* Balsam ; the true *Peruvian* Bark; the bitter  
Costus; *Indian* Bark; Cinnamon; Cloves Cardamoms. Cu-  
bebs ; Mace; Nutmegs ; Savory; Thyme ; Rue;. Mother os  
Thyme ; Lavender ; our Origanum, and that of *Crete-,* Mar-  
joram ; our own and *Turkise* Baum ; *Roman* Chamomile; hy-  
*rian*HerbMastich; Basil; Southernwond; Spikenard; Camel’s-  
hey; Bay and Myrtle-leaves ; together with the genuine, fra-  
grant, and unadulterated Oils distill’d from them. The com-  
pound Balsamics are, the Apoplectic Balsam of *Crsllius*; the  
Balsamum Cellense ; that of *Scherxerus* ; and the liquid Balfam  
of Life; Spirit of *Peruvian* Balsam, prepar’d in my manner;  
Spirit of Amber and Mastich , the Apoplectic Water of *Sen-  
nertus }* the *Aqua Anhaltina* j the true Essence of Amber ; and  
volatile oily Spirits, impregnated with Oll of Cinnamon, Macc,  
and Cedar.

These Simples, and the Medicines prepared of them, by-  
means of their fine, ethereal, fuhtile, and volatile Oil, which  
.is grateful and agreeable to the Constitution, awh upon the  
Fluids as well as the Solids of the human Body,- diffuse their  
Virtues thro’ all its Parts, supply the Blood and Humours,  
with a reasonable Reinforcement of sulphureous, warm, and  
ethereal Parts, increase their intestine Motions, and convey a  
genial Vigour to the vital Juices. They also abound in a stub-  
tile.

tile, acrid, balsihuc Salt, by means of which thev-augment  
the Force and Elasticity of the Heart, Arteries, and muscular  
Fibres, in consequence of which, the Circulation of the Blond  
and. Humours is promoted, the thick and.viseid .Juices atte-  
nuated, Obstructions are removed, and Perspiration is pre-  
served entire, a Circumstance of the.last Importance in curing  
*Diseases. .* 1' '

In all Difeases therefore of the Head, Nerves, Spinal Mar-  
row, Stomach, and Heart, which, according to the Antients,  
procceded from a cold Cause, or, in other Words, from in-  
spiflated and condenfed Juices, or from the Tone of the ner-  
vous and rnufcular Parts being .destroy’d ; such, as Apoplexies,  
Palsies, Numbness: and Torpor of the Senses, Weakness of  
Memory, Difficulty of Hearing, Fainthigs, and excessive  
Weakness, there Medicines may he used both internally and  
externally with due Success.

They are alfo os singular Sendee in those Disorders of the  
Stomach and intestines, which proceed from their Tone being  
too much weaken’d, an Excess of acid and viscid Crudities,  
or a deprav’d Digestion, such as inflations. Diarrheas, flatu-  
lent Colics, and V ornitings. Besides, they have this peculiar  
Advantage, that they are exquisitely suited and adapted to the  
Old and infirm, to such as have the Misfortune of lax Habits,  
or phlegmatic Constitutions.

They are also of singular Service, especially as a Preserva-  
tive, when, in confequehce of a cold and moist Constitution  
of the Year, especially in the Autumn and Winter Seasons,  
and- in the more Northerly Climates; moist Coughs, Diar-  
rheas, pituitous Asthmas, tedematous Tumors, Coryzas,  
Rheumatisms, intermittent Fevers, and Disorders arising from  
a fcorbutic Impurity, either actually rage, or are appre-  
hended.

. But they are to he used cautiously, and in moderate Doses,  
by young People, and Patients of choleric and delicate Con-  
stitutions, as alfo in Cases where the Body abounds with Blood  
and Humours.

, I myself; for more than twenty Years, have used a liquid  
Balsamic, commonly called the *Balsam of Lise,* prepared' of  
the most efficacious of the above-mentioned ingredients, espe-  
cially the Oils genuine and. unadulterated, which is a Medicine  
of fo uncommon Efficacy, that the Person who knows how  
to use it right, both internally and externally, may rest satis-  
ry’d without any other Corroboratives or Balfamics whatever.  
And, indeed, this delicious and efficacious Medicine, is now  
universally celebrated, on account of its corroborating and  
restorative Qualities ; but this, like all other valuable Medi-

. ernes,' has been counterfeited and sold to the Credulous and  
Unwary for my genuine *Balsam of Lise* but the supposititious  
is never able either to answer the Intention, or support the Che-  
ratior, of that Medicine. *Hasseman.*

See BALsAMim. -

See VIT.ffi Balsam™.

BALSAMINA.

There are two Plants which are called by this Name, the  
first of which is thus distinguished :

*Momordica Ealsansma, Qfiic. 'Atomordica,* Schrod; 4. I05.  
*Mtancrdica Officinarum,* Volck. Flor. Non 293. *Mornendica  
vulgo,* Hort. Lugd. Bat. 429. *Momcrdica vulgaris,* Tourn.

- Inst. I03. Elem. Bot. 87. Boerh. Ind. A. 2: 76. Rupp.

- Flor. Jen. 4I. d *Momsrdica, Balsamina, Cucumeraria, Pomum  
mirabiles* Chub. I35. *Mornordica Balsamina mas.* Ger. 290.

- Emac. 362. Park. Theat. 7I4. *Momordica, Balscamina* το-  
*- iundisalia repens seu mas,* C. B. Pin. 300. Raii Hist. 1. 647.

*Balsandna Cucumerina Indica, folia integro, fructu variegato,*'Chom. in Not.Hort. Mal. 8. 22.. Flor. Mal. 52. *Balsa-  
mina Cucumeraria,* j. B. 2. 25 I. *Cucumis puniceus Gordii,*Hist- Oxon. 2. 33. *Piperitis,* Tourn. Mat. Med. 357. *Βα-*

Tie-ienrra-Pied Hort. Mal, 8. 2I. Tab. 2. *Cucumerina Ικ- '  
dica, folio integro, fructu variegato,* Chons; in Not. MALE  
BALSAM-APPLE. - - κί

It is cultivated in Gardens, and flowers in *Augast.*

The Fruit, which is the Part in Use, is of a refrigerating  
and somewhat drying Quality, a Vulnerary, and mitigates  
Pains, especially of the Haemorrhoids. Outwardly, it is good

: for Wounds of the Nerves, Hernia:, and Combustion.

The Balsam which has been made for a long Time of the  
Fruit of this Plant dipt in Oil,, and dry’d in the Sun,, is of  
excellent Virtue in Wounds, Ulcers, especially the Haemor-  
rhoids, Ulcers of the Matrix, and Ruptures.

The other *Balsamina* is thus distinguish’d :

*Peesicaria stliquosa,* CODDED ARSMART. Offic.  
Ger. 36I. Emac. 446. Raii Hist. 2. I328. Merc. Bot. 2.  
28. - Phys. Brit. 9O. Mer. Pin. 92. *Balfamina lutea, five  
Nali me tangere,* C. B. Pin. 306. Tourn. Inst. 4I9. Elem.

. .Bot. 332. Boerh. Ind. A. 320. Raii Synop. 3. 3I6. *Balsa-  
mina, Herba impatiens, seu Nali me tangere, Floris petalo luteo,*

. Hist. Oxon. 2. 282. *Noli me tangere,* J. B. 2. 908. Chub.  
2S7. i *Mercurialis solve fires, Nali me tangere dicta, seue Perst-  
caria saiguofa.* Park. Theat. 2o6. QUICK IN HAND,  
TOUCH ME NOT, y

It is cultivated in Gardens, and the Heth is in Ure; which  
is fo forcible a Diuretic as to induce a Diabetes, and is thought  
to be of a pernicious and deleterious Quality.

BALSAMlTA: MAS, *Cestus hortorum,* Offic. *Balfomita  
mas.* Ger. 523. Emac. 648.' *Ealfarnita mas,sue Cestus hor-  
torum major,* Park. Pared. 4S2.. *sealsamha maser,* Boerb. Ind.  
A. I25. Hist. Oxon. 3. 3. Acts Reg. Par. An. ryI9. 2.50.  
*Castus hortorum maser.* Park. 78. *Mentha hortenses corymbia  
fera,* C. B. 226. *'Menthis coryndtifora,five Cestus hortenses,* J.  
Β.- 3. I44. Rail Hist; I. 363. *Mentha ccrpribifora Graeca,  
Romana, Sarracenica, sive Castus hortenses,* Chab. 368. *-To-  
rta cetum saltis et odore Mentha,* Herm. Can 697. Tourn. Inst.  
46 x. *Tamacetum hortense. Lepidii foliis ferratis i Ageratum in-  
tense redeleus,* Pluk; Almag. 36I. *Thnaceturi hortense, foliis  
et odere Menthae,* Hort. Lugd. Bat. 697. *Ageratum latifo-  
lium serratum,* Hort. Motile. 7. *Mentha Sarracenica,* Ofiic.  
Ger. COSTMARY. , - \* ' 4.

- The Roots of CostrnSry are' hard, longi and stringy,' creep-  
ing in the Ground ; the lower Leaves are about as big as Gar-  
den Mint, of a palish or yellow-green Colour, standing on  
long Foot-stalks, very neatly serrated about the Edges. The  
Stalks rife to be more than a Foot high; having several the like,  
hut smaller Leaves growing on them, they are divided into  
Branches toward the Top, each of which , is terminated by a  
thin *Corymbus* or Uinbel of naked, deep,, yellow Flowers,  
having no *Pecala* surrounding them, but set in scaly *Calyces,*being lesser than the Flowers of Tansy. The whole Plant  
has a soft, pleasant Smell. ' It is planted in Gardens, and stow-  
ers in *July. . - ’*

The Leaves are chiefly used, being warm and-drying, of Use  
to heat and strengthen the Stomach; and to cafe the Head-  
ach, arising from the Disorders, thereof, to expel Wind, and  
prevent four Belchings. It likewise-opens Obstructions of the  
Liver and Spleen, and is good for the Dropsy and jaundice.  
Outwardly it is used in beating and warming Fomentations  
and Bathings, being good to comfort and strengthen the Limbs.  
*Miller’s Set.- Oof.*

BALSAMUM, Balsam. Of this there are many Sorts,  
both .natural and artificial. - . -- '

Under the. Distillation of Turpentine, *Boerhaave* gives an  
Analysis of all the natural *Balsams,* as follows:

*The* **VINEGAR, SPIRIT,** *tWO Kinds of Cess,* **ROSIN,** *and***CoLorHONY,** *from* **TURPENTINE,** *distilled by the* **Re-  
tort.**

I. Take a clean, new Glass Retort with a wide Neck, and  
cut it off short, so that the Mouth may remain large and  
capacious, which is-a principal Requisite in this Opera-  
non ; then heat pure native Turpentine in an earthen  
Vessel, having a Lin to pour out at, by putting rhe Ves-  
sel into scalding hot Water, till the. Turpentine grows  
fluid like Water ; then pour this melted Turpentine hot,  
in .at the wide Mouth of the Retort, which is first to he  
strongly heated to prevent its cracking as. the Turpentine  
is poured in. Let two Thirds of the Retort he thus  
filled, and leave the other Third empty ; then hold the  
Retort, so filled, with its Neck erecti till the Turpen-  
tine shall heve run quite down the Neck, into the Bclly,  
if any of it happen to stick to the Neck in pouring-;  
otherwise this gross Turpentine would run down into the  
Receiver in the Distillation, and foul the Liquor that first  
comes over : Now place the Retort:in a Sand Furnace,  
and lute on a elean Receiver.

2. Make a Fire that may heat the Sand to about one hun-  
dred Degrees, and carefully keep it at this Height, so  
long as" it drives over any Liquor ; by which means a thin,  
limpid Fluid, resembling Water, will come over, anil  
fall to rhe Bottom of the Receiver, whilst another lim-  
pid, thin, and oily Liquor floats upon it. When nothing  
more rises with mis Degree of Fire, change the Receiver ;

‘ the under Liquor will he found gratefully acid, saline,  
aqueous, mifeible with Water, refreshing to the Stomach,  
spirituous, and excellently diuretic. It will make an Ef- 1fervescence with Chalk, deposit its Acidity therein, and  
afterwards distil from it in form of a pureWater: Whence  
we perceive, that the acid Salt and Water first come over  
in this Distillation. The other Liquor, which stoats upon  
.. this, is a light, -pure, thin, almost spirituous and. inflam-  
mable Oil, thence- called the *Ethereal Oil of Turpen-  
tine,* which is fo penetrating as to vanish when rubbed  
upon the Body, pass into the Blond, and soon communi-  
cate a violet Smell to rhe Urine ; which is an evident  
Sign of the Power it has to pass thro’ all the Pores.

3. Let a proper Receiver be now applied, and a Heat, equal  
to that of boiling Water, be raised . this is done by  
pouring Water upon the Sand, and hearing it with the  
Fire underneath, to two hundred and twelve Degrees,  
where it is to be kept, continually adding as much boil-  
ing Water as exhales away. The Matter remaining in

the Retort, after the first Operation, is lest so thick as - to  
appear consistent in the Cold ; but now- melts again,  
crackles between whiles, and again affords an acid Water,  
like the formes, that sells to the Bottom, and an Oil  
also, like the former, floating at the Top, but somewhat '  
thicker, and a littie yellowish : Both of them have nearly  
**the** same Virtues as mentioned above.

**4.** The Receiver being again changed, and the Fire gra-  
dually increased up to a strong Degree of a Sand-heat,  
tho' with Caution in the raising it, there will come over  
an acid, ponderous, red Water, that ntns separate  
into the Bottom of the Receiver, and a thick, red, pene-  
trating, tho’ somewhat viscous Oil floating on its Top;  
and it is remarkable, that this acid Water always conti-  
nues to rise with the Oil, and not theWaterfirst by itself,  
and the Oil afterwards. What now remains in the Bot-  
tom, after this last Distillation, proves, when cold, ex-

' ceedingly red, shard, and brittie.

**5. I** have urged this remaining Matter with Caution,' and  
by flow Degrees, up to thestrnogest Heat that Sand, and a  
Fire of Suppression, would afford ; and have thus obtained  
red Oil, so thick and viscous, aS to resemble Turpentine  
itself; but it was os' a red Colour, and some red, acid.  
Ponderous Water still continued to rise with it, leaving  
scarce any thing behind at the Bottom of the Retort.

6. There is the greatest Caution required in this Distilla-  
tion, to prevent the Glasses bursting or cracking, where-  
by a dense, oily Fume would immediately escape, which  
readily takes Fine, and can scarce be extinguished ; whilst  
the Fine is impetuoufly hurried into the Retort with a  
Flame that bursts the V eflels to Pieces in a dangerous.  
manner. Turpentine is otherwise commonly distilled in-  
to an acid Water, an ethereal Oil, or Spirit os Turpen-  
.tine, after this manner : Fill one third of an Alembic  
with pure Rain-water, and add thereto half its Weight of  
good Turpentine; then six on the Head, and use the  
Worm and Refrigeratory. Thus distilling with Care, and  
a Fine that makes the Matter gently boil, there comes  
over an acid Water, and a pure light Oil. If the Distil-  
lation he continued so long as this Oil continues to run,  
there remains behind a kind of, Colophony in the Still:  
And if the Flowers of Lavender, Roses, or other odori-  
serous Plants, be here put into the Still, the Oil will  
come over fragrant by this Operation. Therefore Tur-  
pentine is resolvable into Water, a saline, acid Spirit, a  
volatile Oil, and a more fixed Colophony. It is here  
chiefly remarkable, that the Remainder proves so much  
the thicker, redder, harder, and more brittie, the more  
Water, Acid, or Volatile Oil comes over ; and that even  
this last fixed Matter itself at length liquifies, and becomes  
volatile with the utmost Violence of the Fire : And this  
acid Water, being well separated and rectisy'd from all its  
Oil, perhaps affords the best Vegetable Acid hitherto

' . known.

**REMARKS.**

**I.** Hence we learn under what Form native Oiis reside in  
Plants; for, first, the nutrimental Juice, drawn from the  
Earth, seems to be a somewhat tart and aqueous Liquor,  
which, when received, gradually deposits its more unctuous  
Matter in certain Parts of the Plant; and this unctuous  
Matterafterwards uniting more of the same to itself, by Heat,  
Maturation, and the Assistance of the whole Powers of The  
Plant, it then appears in the Form of a fat Oil, which be-  
ing driven outwards, and undergoing the same Changes in a  
greater Degree, at length constitutes a *Balsam,* containing a  
Water, a saline Acid, .and unctuous Spirit, and different  
Kinds of Oil, all mixed together, yet separable ; and aster  
the Separation of any particular Part, the *Balsam* con-  
stantiy changes to a different Form. Hence appears the  
great Difference of native *Balsams* in Chirurgica! and other  
Medicinal Uses; whilst they act in their own Substance,  
and so by means of all their Principles together, or only by  
means of certain, particular, separated Parts. When used en-  
tire, and mixed with the Yolk of an Egg, Turpentine becomes  
somewhat more soluble, and an admirable Remedy for exter-  
nal Chirurgica! Uses'; and, internally, it proves excellent in  
- many Distempers, where it gives Signs of its extraordinary

Virtue, by its penetrating Nature, and the violet Smell it  
communicates to the Urine. We have many *Balsams* of  
this Kind, not differing so much in Virtue, as in Price and  
Place of Growth ; as tho *Asiatic, Egyptian, Hicrechuntan,  
Judaic, Memphiiic Balsams,* and *Balm of Gilead*; for thefe  
several Names at this Day denote the same thing ; or a  
*white Balsam.* in the Form of a liquid Turpentine, and of a  
citron Smell. The *American Bals.ams* are various, and pro-  
ceed from different Trees ; as the *Bals.am ofCapivi,* which  
is of extraordinary Virtues ; the *Balsam of Peru, Tolu,* and  
liquid Amber, \* '

. The true Turpentine proceeds from the Turpen tine-tree  
Of *Chia,* the Fin, the Larch, and the Pine ; hut all these  
Kinds generally resolve into the same Principles. by Heat.  
and Distillation, change alike with Time, and produce the .  
same Effects.

2. We know, likewise, that all the Rinds we are hitherto oc-  
quainted with, contain' an acid Water, or Spirit, which is  
volatile, preservative, eserine, and penetrating, of great.  
Medicinal Virtue and Fragrance : This Spirit easily exhales,  
and leaves the *Balsam* deprived thereof, and therefore less  
excellent.; -whence these *Balsams* are not the better for,  
keeping.

3. The Oils which first come over are light, limpid, totally  
inflammable, extremely penetrating, bitter, and of great **Use**in Surgery, as being highly anodyne, .resolving, and healing,  
when apply’d warm to the Membranes, Nerves, or Ten-  
dons, that are lacerated, pricked or cut, and an immediate  
and safe Styptic, apply’d to the wounded Veins or Arteries  
in large Hemorrhages, as at once defending the Nerves,  
'stopping Putrefaction, and incarning. in these Cases it  
should be apply’d very hot to the Part ; and kept thereon  
by a proper Pledget and Bandage. Its *balsamic* or embalm-  
ingWirtue is extraordinary ; sor if the Bodies or Parts os  
any Animals be for some time steeped in this Liquor, then  
taken out, and awhile suspended in the Air, and afterwards  
dipped afresh, they at length acquire a Case, under which  
they may be long preserved from Putrefaction : But the Bo-  
dies plunged into this Oil, whilst contained in Glasses, are  
preserved perfectly uncorrupted. It has,’ however, this in-  
convenience, that it gradually grows- opake and thick. The  
Oil, being used hot externally, discusses cold, viscid, and  
mucous Tumors, defends the Parts against Cold, relaxes and  
softens them. When used internally, it also proves aperi-  
five, heating, sudorific, and diuretic, communicating **a**quick Smell of Violets to the Urine : Whence it proves  
serviceable in the cold Fits of intermitting Fevers, and being  
.rubbed along the Back-bone, before the cold Fit is expected;  
it will even cure Quartans. It must, however, be used  
with Caution, because, is taken too largely, it affects the  
Head, occasioning Heat and Pain therein, and also proves  
Violentiy diuretic, and occasions an Effusion of the Liquor  
of *ffi&Prostate Glands,* and *she Semen*; and therefore, if used  
with Moderation, it excites Venery. Hence it came to he  
recommended in the Cure of a Venereal Running, where  
it often proves mischievous, as being subject,‘when freely  
used, to inflame the Parts, and increase this Disorder.

4. The thicker Oils that come over in this Distillation are.  
more *balsamic,* incarnative, and anodyne, more penetrate-  
ing and emollient; and- are therefore used aS Styptics; in-  
stead of the former thinner *Balsam,* in hotter and more  
inflammatory Constitutions j -in other respects they agree  
with the formes,. But the last thick and viscous Oil is an  
admirable incarnative, that heals almost without Suppuration,  
and a most extraordinary Anodyne. This Oil- also makes  
such an Effervescence with *Nlaubguls* strong Spirit of Nitre,  
as often to take Flame.

.5. Whet remains behind upon the Distillation of pure Turpen-  
tine with Water, or after the first Oil and Spirit are drawn  
over, proves hard, brittle, transparent, and red in the Cold.  
Is this be gently melted, and any Insect be dipped therein,  
and carefully taken out again, it will he surrounded with **a**transparent CaseTike. Amber, thro’which the Subject may-  
be eommodiousty view’d ; and rhe Whole may be thus kept  
for a long time healthful. and unalter'd, provided the Polish  
be not obscured, as it easily is, on account os the greatBrit-  
tleness of this resinous Crust. But the Colophony, remain-  
..ing aster the seeded Distillation, is. harder and redder, and  
easily reduciHe -2 fine Powder, which has little Smell **or**Taste. This is that extremely useful Powder, which is  
so advantageoufly apply’d to the bare Bones, Periosteum,  
Tendons, or Muscles, in case they are either burnt, cor-  
roded, bruised, cut, .pricked, or lacerated ; and affords an  
excellent Remedy in setons Fluxes of the Joints, and admi-  
rably procures a Cicatrix; In the same manner it takes  
down the fungous ExcrescencieS os Ulcers whence it ap-  
pears, .that Turpentine serves for many Chirurgica! Purposes.  
But nothing is here more extraordinary than the successive  
spontaneous Inspissation of the first exceeding thin .Oil, **so**as to recover the Thickness os Turpentine again, and aster-  
.wards the Consistence of a thicker *Balsam,* and at length of  
RRofin ; tho’ there.is less Acid in these regenerated Rosins,  
than in the native. .

6 . Possibly, therefore, the native, acid, volatile \* Salt con-  
sained in this sat unctuous Substance, - and in the Water,  
is the same Spirit, which, in other essential Oiis,' consti-  
.. tutes the aromatic Spirit ; for it is so lodged in the native  
Fat, as, together with’the Water, to lie concealed under  
the Form of one mixed Body : Whence natural *Balsams use*

changed into Oils, upon losing their Waler-, arid.their Ro-  
sin: Again, *Balsams* are changed into Rosins upon losing  
their Water, Acid, and Oil; whence this happens sponta-  
neously with Time in the open Air, whilst the Action of  
the Sun, by dissipating the Add, the Water, and the thin  
Oil, at length, through various Degrees, brings it to a Ro-  
sin. Whence Oils in the Spaing are Rosins in the Winter,  
and in Autumn afford a proper Covering to Trees, so as to  
defend them from Cold, Dryness, and Frost:

This Experiment clearly shews, (I.) That the utmost Heat  
of the Sun, long continued, may gradually inspistate and  
change liquid Oils, through various Degrees of Thickness,  
up to that of Rosin or Colophony: (2.) That the Heat of  
boiling Water has this Effeol sooner , and, by discharging  
the Oil, leaves a Colophony behind in four or five Hours  
tube, whilst the exhaling Fume proves an sold Water, and  
a Spirit mixed among a large Quantity of Oil; the Colo-  
phony remaining hard behind. (3.) That this Colophony,  
being urged by an Heat of two hundred and eighty Degrees,  
is again resolved into an acid Water, and a red, .viscous, pon-  
derous Oil, leaving an extremely hard, transparent Colo-,  
phony behind, of a Colour compounded of Red and Black,  
and capable of enduring unaltered for Ages. But when,  
this itself comes again to be urged with the utmost Violence  
of a Fire of Suppression, so as almost to melt the Glass, its  
whole Quantity is, by the sole Force of the Fire, turned  
in to an oily liquid Substance, though somewhat viscous, with- '  
out leaving any hard Colophony behind. (4.) Whence we  
learn both the changeable Nature *of vegetable* Oiis, and  
the surprising Variety of the Action of the Fire upon  
them; which, with a certain Degree of Heat, inspissates  
thin Oils, and brings them- to an hard consistent Masts,  
that would always remain the same ; though a greater De- -  
gree of Fire again reduces it to a liquid Oil, which likewise  
would long continue in mis State ; but, by a repeated Distil-  
lation with a strong Fire, it becomes totally liquid, and con-  
siderably thin ; whence it is certain, that many Bodies owe  
their Hardness, and others their Fluidity, to the Fire: *Boer-  
Faavrs Chymijiry.*

The . very Word *Balsam* seems, in all Ages, to have had an  
Idea of Excellence and Efficacy affixed to it, above any  
other Branch of the *Materia Medica ,* for the antient Phy-  
sicians, by thisWord, meant any Species of Medicine, which  
powerfully recommended itself by a grateful and delicious  
Fragrance, and whofe Use, both internal and external, was  
of singular Efficacy in preventing Putrefaction, and resisting  
Corruption. *Balsams,* ’tis true, were originally used for  
. embalming and preserving the dead Bodies of thole, who,  
during their Lives, had signalized themselves by great and  
heroic Deeds, or endeared themfelves to Mankind by the  
Practice of the several Virtues. And when the thinking and  
sagacious Part of Mankind observ’d, that the Bodies of the  
Dead, were, by means of *Balsams,* enabled to defy the At-  
. tacks of Corruption, for an immense. Series of Years, they  
began to imagine, that their Virtues might extend , to the  
Living, protradt Life, and corroborato what they called the  
*Calidum Innatum* fluctitatiog in the Blood. But however  
. unintelligibly they may have talked upon this Point, yet ’us  
certain, the Notion itself was just and well-founded, since we  
, are taught by Experience, that amongst the vastVarietyand in-  
finite Store of Medicines, with which the Mineral Animal,  
andVegetable Kingdoms supply Mankind, none are more pow-  
erful, none more efficacious, than those which come under the  
- Denomination of *Balsams* and *Balsamics.* But as *2Ά Balsams*\_ are not allke efficacious, nor equally adapted to Medicinal

Ufes, I shall only consider thofe *Balsamics* which feem best  
. calculated to anfwer the Intentions of Medicine, whether  
Preservative or Curative; and that I may execute the Design  
with tire greater Accuracy, and afford the inquisitive Mind  
the higher Satisfaction, I shall specify the Principles by which  
they operate, enumerate their several Virtues, and give Di-  
rections with regard to their Uses. But, for the sake of Per-  
--fpicuity, it will not be improper to inquire into the Origin  
of the Word *Balsam,* and ascertain the precise and deter-  
minate Idea, which I myfelf affix to in.

since then the inhabitants of *Palestine,* and the Coasts of *Pboe-  
: nicia,* and perhaps their Neighbours,the *Arabians* and *Egyp-  
tians* , were, according to the Accounts we have, the first who  
used *Balsams,* common Sense directs us to the Genius of the  
Oriental Languages for the Origin of the Name. Whether  
then it is a simple Word, which is most probable, and most  
confortant with the Genius of the Eastern Language, deriv’d  
from enwa *Bosun,* a Word peculiar to the *Hebrews, for*expressing the most fragrant and delicious Substances, in  
. which .other Nations have probably inserted an additional

Letter, as in many, other Instances they did; or whether  
with others we maintain, that it is compounded of ρθφ hyv-j  
*- Baal Schemes,* which signifies the Chief ar Prince of Oiis  
and Spices; yet still it amounts to the same, since by the  
Import of the Word, in heth Cases, ’tis plain, that only

the best Spices, Oiis, mid Resins, and such as excelled all  
others in their Virtues, the Fragrancy of their Small, and  
the Sweetness of their Taste, were called *Balsams.* Neither  
shall I, in the Course of this Dissertation, affix any otber-  
Idea to the Word *Balsam* or *Balsamic,* than that of a Media  
cine possessed of a sulphureous, . resinous, and oily Princi- -'  
ple, which at the. fame time must he fragrant and friendly to  
Nature, and by means of which it operates: Two things  
must therefore concur to chara&errse and constitute a *Bal-  
sam i The first* is, that the greater Part of the Substance  
ought to he inflammable, that is, either of an oleous, or  
refrnous Nature. The fecond Circumstance necessary to con. „  
stitute a *Balsam,* is, thet the Substance be of a grateful  
Smell, and pungent Taste, thet it may give Proof of its  
Efficacy, and of the Smallness and Minutencss of its Parts:  
So that, according to this Hypothesis, all Sulphurs, and re-  
sinous Substances, as also all inflammable Oiis, though of the  
Consistence of a *Balsam,* are yet to he excluded from the  
Clafs of genuine *Balsamics,* if they want that Fragrancy of  
Scent, and Deliciousness of Taste, which are requisite to  
constitute a *Balsam.* ThusNaphtha, or Rock Oil, *Jews* Pitch,  
Pitch, Resin of the Pine, .the Oils of Turpentine and Fir,  
ought by no means to be ranked among the Class *ABalfamics,*though they are inflammable penetrating Substances, excel-  
lent for the Purposes of embalming, and promise very salu-  
tary Effects, both when used internally and externally. Yet .  
becaufe they abound in a too strong, acrid, and penetrating  
Sulphur, which is not altogether friendly and agreeable to  
Nature, they are therefore less sit for restoring lost Vigour, .  
and recruiting impair’d Strength. Nor are Substances whose  
sole Property is Fragrance of Smell, such as Civet, Musk,  
and the fragrant Flowers of Jessamin, Oranges, er the Hy-  
acinthus Tuberosus, to be properly esteemed *Balsamics,* be-  
cause Fragrancy alone, which is owing to a fine and easily  
exhal'd Sulphur, is not sufficient to constitute a *Balsam ;*but Sis necessary, that this fragrant Principle be blended and  
incorporated with a subtile acrid Oil, and an inflammable

**7** Refin.

**BALSAM** of MBccHAi

’Tis therefore justly to he doubted, whether a true and  
genuine *Balsam* is to be found in the Animal Kingdom. Mean .  
time the Vegetable Kingdom is richly stored with Medicines of  
this Class, of which the most antient, and that which first bore .  
the Name of *Balsam,* is the *Opobalsem,* both *Arabic* and *Egyp-  
tian.* This was produced by a small Tree growing *\n Judea,  
Egypt,* and *Arabia,* the Whole of' which was of a fra-  
grant Smell; and when an Incision was made into its Bark,  
it yielded a resinous juice of a most grateful Odour, and of  
uncommon Virtues. The Antients called the Wood of this  
Tree *Xylobalsamum,* and its Fruit *Carpobalsemum;* hut the  
Name *Opobalsamum* was appropriated to its Juice or Tears. Of  
this Tree, *Strabo* the Prince of antient Geographers gives us the  
following Account, *Lib.* I6. “ There is a Field near *Jericho*" in *Palestine,* in which there is a Nursery of *Balsam-trees.*“ This Tree is a certain small, odorous, aromatic, and fruti-  
" cose Tree, not unlike the Cytisus, or Turpentine-tree. r\*" When an incision is made into its Bark, it yields a Juice  
resembling viscid and tenacious Milk, which, when re-

"" ceived in Shells, coagulates. It wonderfully cures Head-  
“ achs, recent Inflammations of the Eyes, and Heavinesses -  
" and whet contributes much to the Value of this Medicine  
“ is, that it is found no-where elfe hut here.” *Prosper Alpi-  
nus,* the most accurate Descriher of rhe *Egyptian* Plants, agrees  
with this Account, and in *Tract, de Plant. Apgypt.* writes thus :  
.“ The *Xylobalfam* is a small Tree, which grows to the Height  
" of the Cytisus, hearing few Leaves, which resemble those  
"" of Rue, or those of the Mastich-tree, hut which are always  
green. Its Branches are odorous, and so gummy, as to stick  
"" to the Fingers when handled.' It bears final! white Flowers  
"" refembling thofe of the *Egyptian* Thorn, but very fragrant,  
from which arise yellow Seeds, contained in Hu&s of a  
blackish red Colour, very fragrant, and containing within

♦" them a yellow Juice, which bears .a near Resemblance to  
" Honey ; and which affects the Tongue with S bitter, and  
“ somewhat acrid Taste, and smells like *Opobalsamum.* Its  
Fruit, in Figure and Bulk, resembles that of the Turpentine-'

" tree.v ’Tis to he observ’d, that several Authors assert, that  
this Tree does not grow naturally in *Judea,* but was brought  
into it when a great many other Plants were transplanted from  
*Meccha,* a Town of *Arabia Felix,* into *Palestine,* whence  
they were convey’d into *Egypt in* the Days of *Mark Antony*and *Cleopatra.* Many are of Opinion, that there .is now no.  
such thing as the true *Opobalsem,* ami that the genuine Species,  
of old produced' in *Egypt,* -is not to he met with in any Part of  
the World; for that which is sold for *Opobalsamum* in small -  
Boxes made of -the Shells of Nuts, is, in their Opinion, com-  
posed of *Peruvian Balsam, Benzoin,* and *Storax,* as *Pomet,*in his History of Drugs, ioforms us. But it seems pretty  
probable, that there is at this vcrv Day such a thing as true

*Opobalsamum* j for that brought from *Meccha,* which is called  
the *Balfam. of Meccha,* and is deseribed by a great many Au-  
thors, is of equal Efficacy with the *Qpobalfamumi* It is a Li-  
quor of an oleous Nature, as thick aS Turpentine, of a pene-  
trating and grateful Taste and Smell. It is sold at a very high  
Price, since bass an Ounce of it cannot he purchased under two  
Imperials (about one Pound five Shillings). *Clustus, vs Exoticis,*is of the same Opinion with regard to the *Opobalsamum* being  
still in the World; for in *Lib.* χο, *Sect.* 9. *de Balsamis,* he has  
these Words: *" Arabia Felix,* the Country which has in all  
“ Ages, and now does produce *balsamic* Plants, affords true  
"" and genuine *Opobalsamum.”*

This *Balsam* was always had in so great Esteem by the An-  
stents, that they made it an Ingredient in their most noble An-  
tidotes, which were sold for double their Weight of Silver, ac-  
cording to *Theophrastus, Pliny,* and *Diofcorides.* This is easily  
accounted for, since the *Balsam-tree* being very small, and not  
able to afford a great Quantity of the *Opobalsamum,* its Price  
must of course have run high. This also was the Reason why  
the *Opobalsamum* of the Antients, according to *Lobelias* in  
*Animadverstonibus,* was often vitiated with Cyprus Turpen-  
tine, or Oil of the Mastich-tree. Since then the *Balsam* of  
*Meccha,* of all others the finest, is, without Doubt, the true  
*Opobalsamum* of the *Egyptians,* and exactiy resembles in in all  
its Qualities, its Ufe in Physic is for this very Reason to be  
highly commended ; for of this, dissolved and prepared with a  
spirituous Menstruum, in which Amber is intimately mixed,  
very efficacious and elegant Medicines may be prepared for in-  
ternal Use. *Hoffman.*

This precious Balsam-tree is thus distinguish’d :

**BALSAMUMJUDAIcUM, GILHADENSB, έ***MECHAVerum,  
et Opobalsamum, feu Oleum Balsami, five Balsamelaeon,* Offic.  
*Balsamum Judaicum,* ind. Med. I8. *Baljamum de Macha  
Jnddicum, Gileadense, Opobalsamum,* Cornmel. Plant..Usu.  
85. *Balsamum st Mecha, Balsamum verum,* Mont. Exon I 6.  
*Balsamum verum,* J. B. I. 298. Chain 24. Raii Hist. 2.  
1755. *Balsamum genuinum antiquorum.* Park. Treat. I528.  
*Balsamum ab Aigyptiis Balejsan,* Alp.AEgypt. 60. *Balsamum,*Vesting. Obs. 17. *Balfamuon Alpini,* Ger. I343. Emac. .  
I528. *Balsamum Syriacum, Rutae folia,* C. B. Pin. 4.00.  
THE TRUE BALSAM-TREE.

- This is the thin or liquid Rosin of a small Tree or Shrub,  
that grows aboutAfivahe *in. Arabia,* bearing ever-green pinnated  
Leaves, in Shape like those of the *Lentiscus* or Mastich-tree,  
-with an odd one at the End of the Stalk. It bears small six-  
leaved whitish Flowers on the Top of the Stalk, which are  
followed by llttle roundish rugged Fruit, pointed at the End.  
This Fruit, which is the *Caerpobalfamum,* and the Wood,  
which is the *Xylobalsamum,* are preseribed in some old Com-  
positions ; but by reason they are not to be had in the Shops,  
other things are substituted hi their Places.

This is a resinous Liquor, which at first is of the Consistence  
of sweet Almonds, but by Age becomes like Turpentine,  
loses much of its Smell, and grows sometimes blackish.  
When fresh, it is of a very agreeable aromatic Smell, and ofa  
Taste like Citron-peel. The Plant, from which it flows, is  
called *Balsamum Syriacum, folia Rutae,* C. B. P. *M. Lippi,*sent by *Lewis* the XIVth Embassador to the Emperor of the  
*Abyssenes,* heing in *Egypt,* was at great Pains to discover this  
Plant, and the brays of procuring the *Balfam* from in. The  
Substance of what he could find out is, that there are three  
ways of collecting it, and that there is some Difference in the  
Liquors collected each way. The first runs of itself from the  
Tree, the second by Incisions, and the third is got by boiling  
the Tops of the Trees. The *Balfam,* that riles first after a  
gentle Decoction, is very good, and much esteemed; but what  
is got afterwards, is the coarsest Sort, and of least Value. The  
first kind of *Balsam* is sent entirely, to the Seraglio of the  
Grand Seignior; the other Sorts are suffered to be exported.  
This Balsam is not now to be found in *Judea,* which was its  
antient native Soil, and where it was very common before the  
Destruction of *Jerusalem* , but soon after that, the *Jews* de-  
stroyed all their Trees, lest the *Remans* should make Advantage  
of them. At profent, it is found near *Meccha,* and *Grand  
Cairo in Egypt,* from whence it is carried to *Coastantiwpla,*where it is in great Esteem. In *Apia* it is given in the Quan-  
tity of two Scruples, as a Diaphoretic in malignant Fevers;  
and it is undoubtedly an excellent Medicine for deterging UN  
cers in the Lungs, Kidneys, and Bladder, and. even for dissolv-  
ing, pulmonary Concretions. But the Ufe of it ought to be  
avoided in inflammatory Dispositions of these Parts, even tho’  
ulcerated. It ought likewise never to be given when there is  
an Erysipelas in any Part Of the Body whatever. It is ufed  
with good Success in Gonorrheas and the Fluar Albus, being  
given from ten to twelve Drops early in the Morning fasting,  
the Patient's Body having been well prepared, and the Running  
having continued some time. It is usod externally in Wounds  
without Contusion, as a Detergent.

The Ladies in Apia use it as a Cosmetic, and-especially in  
the Seraglio of the Grand Seignior. In *France* the Ladies for-

merly prepared a kind of *Lac Virginale* with the yellow *Balsam.  
ofMeccha,* dissolved in Spirit of Wine; but .they were soon  
tired of this Method, becaufe it leaves a Crust on the Face.  
The true Mariner of preparing this Cosmetic, is as follows;

Take *Balsam of Meccha,* and Oil of sweet Almonds, of each  
equal Parts ; mix them well together into a kind os *.Nu-  
tritum.* On three Drams of this *Nutritum* in a Matrast,  
pour six or seven Ounces of Spirit of Wine, and leave  
them in Digestion, oil a sufficient Tincture is extracted.  
Then feparate this Tin&ure from the Oil, and pour about  
an Ounce of it into eight Ounces of Bean-flower Water,  
or any other Water of the same hind.

This Mixture is a *Lac Virginale,* which will answer all the  
Intentions of a Cosmetic, without any Inconvenience. The  
*Balsam of Meccha* is an Ingredient in the Theriaca and Mi-  
thridate. *Geoffrey.*

Though the *Balfam* of *Meccha* is by most Authors agreed to  
be the fame as the *Opobalsamum,* yet *Pomet* feems to think  
them somewhat different. This Author, speaking of the  
*Balfam* of *Judea,* fays. That the *Turks* have transplant-  
ed the Trees which produce this *[Balsam,* from *Judea,, ta*Gardens in *Grand Cairo,* where they are guarded by fevcral  
*janifaries* during the Eime the *Balsam* flows. A Friend *of*mine, who has been at *Grand Cairo,* assured me, it was im-  
possible to get a Sight of these Shrubs, except over the Walls  
that, inclose them, the Entrance ' being prohibited to the  
*Christians.* And as to the *Balsam,* it is almost impossible to..  
get any upon the Place, unleg it is -by means of some Embassa-  
dor at the *Porte,* to whom the Grand Seignior has made  
a Present of it, or by the Janifaries, who watch this precious  
*Balsam,* by which we may understand, that what several Cheats  
pretend to sell for true *Balsam,* is nothing hut white *Balfam* of  
*Peru,* which they prepare with Spirit of Wine rectified, or  
with some Oils distilled.

But as it is met with fornetimes amongst the Curiosines of  
People of Distinction, so in 1687. there happened to be a  
Quantity amongst those of *Madame de ViUefavin,* amounting  
to about fourteen Ounces in two leaden Bottles, as it came  
from *Grand Cairo,* which was sold to a Person who let me see  
it. We found it to be very hard, of a golden-yellow Colour,  
and a Smell like that of a Lemon. . But, since that, a Friend  
of mine gave me oneGunce, which he brought himself from  
*Grand Cairo,* and was of a solid Consistence, like that of Tur-  
pentine of *Chia,* and of the Smell abovesaid, which is the true  
Sign of its Goodness.. *Pomet.*

I don’t know, that I ever saw the true *Balsam* of *Jndea* more  
than once. It answers exactiy the above-mentioned Character-  
istics, and was brought from the East, on purpose for the Use  
of the late Prince *George* of *Denmark.*

Every Druggist in *London* will fell what is pretended to be  
*Opobalsamum* ; but by what has been said it appears, howcru-  
elly both Physician and Patient ate frustrated in their Expects-  
tions, when instead of this precious *Balsam,* one of a very  
different Kind is substituted in its Room.

*Pomet,* speaking os the Balfam *AMeccha,* fays,. The *Turks,*who go a Pilgrimage every Year *tv Meccha,* bring from thence  
a certain dry white *Balfam,* in Figure resembling white  
Copperas calcined, especially when it is stale. The Person who  
made me a Present of about half an Ounce, assured me,  
that he brought the fame from *Meccha* liquid ; and that, as a  
Cosmetic, it is equal to the *Balsam of Judea. Pomet. . ' '*

I cannot think this a sufficient Reason for supposing the *Bal-  
sam* of *Meccha* different from that of *Judea,* contrary: to the  
Opinion of most Authors. '

*Diofcorides* gives the following Account of .the true *Balsam.*

The *Balsam-tree* grows to the Bigness of the Lycoium, (Ly-  
cium, according to some) or Pyracantha, and has Leaves like  
Rue, bitt much whiter, and far more an Evergreen. It  
grows in a certain Valley of *Judea* ooly, and in *Egypt,* differ-  
ing in rosiest of Roughness, Tallness, and Slenderness. The  
fine and capillaceous Part of the Shrub is called *The Gatherings*τόεβιστὸν), perhaps, because its Slenderness renders it easy to he  
gathered. What they call the *Opobalsamum,* is taken in the  
Heat of the Deg-days, from Incisions made in theTree by Iron  
Instruments, of the Figure of human Nails; but fo little distlls,  
that they collect no more than six or feven Chose [see Choa,  
or Chus] yearly, which is fold upon the Spot, for double its  
Weight in Silver.

The Juice of *Balsam* which is good, is new, smells power-  
fully, is pure, not inclining toSournefs, is easily diluted, smooth,  
astringent, and moderately biting upon the Tongue. It is adul-  
terated several ways; some mix with it Ointments, as those of  
Turpentine, the Cyprinum, Lentiseinum, the Sufinurn, Ba-  
laninum, and Meropium, *(See these in their proper Places)*Honey, and Cerate of Myrtle, or very llquid Cyprian. The  
Fraud is easily discovered in the following manner.

The puremihre, if dropped upon a woolen Garment, may  
be washed off without leaving the least Stain or Mark; but the

adulterated sticks to the Plane. The pore also; dropp’d info  
Millt, coagulates it, which the adulterated will not do. Again,  
thepure, if pour’d into Milk orWater, is instantly mix’d with  
it, and turns milky; but the adulterated swims on the Top, .  
like Oil, contracting itself into a Roundness, or diffused abroad  
in the Figure of a Star. Moreover, the pure *Balm* grows thick  
with Age, and loses its Virtue. They are mistaken who ima-  
gine, that pure *Balm,* when dropp’d into Water, first sinks to  
the Bottom, and afterwards rises to the Top, and freely dif-  
fuses itself . -

The Wood call’d *Xylobalsamum* is known to be good by its  
Newness, its being in stender Branches, its red Colour, and  
Fragrancy, diffusing its Odours in some measure like the *Opo-  
balsamum.* Chuse such Seed (since .this also is necessary to be  
used) as is of a yellow Colour, plutatu large, ponderous, of a  
hot hitingTaste, and smelling, in forne moderate Degree, like  
*Opobalsamum.* The Seed is brought from *Petra,* and resembles  
that of Hypericum, with which it is also adulterated ; but you  
may know the Hypericum-seed by its Excess in Bigness, its  
Vacuity, Want of Virtue, and a Taste like Pepper.

The Juice is of extraordinary Virtue, as feeing of a very  
heating Quality, by which it deterges whatever darkens the  
Pupil of the Eye ; and, used as a Pessary, with Cerate of Roses,  
cures Refrigerations of the Uterus, provokes the Menses, and  
expels the Birth and Secundines. In Shiverings, being used as  
an Ointment, it causes a Solution thereof; and .deterges the  
Filth of Ulcers. Drank inwardly, it helps Digestion,, and  
provokes Urine; and is good for such as are troubled with a  
Difficulty of Breathing. Taken in Milk, it helps thofe who  
have swallow’d Aconituni, or been bitten by Vipers. It is an  
Ingredient in Acopa, Malagmas, and Antidotes. Universally  
speaking, thejuice of the *Balfam-tree* has the greatest Efficacy ;  
next to this the Seed, and the Wood least of all. The Seed,  
drank, is good for the Pleurisy, Peripneumony, Coughs, Scia-  
tica, EpilepIy, Vertigo, Orthopnea, Gripes, Difficulty of '  
Urine, and the Bites of Vipers, and other venomous Beasts.  
It is also well accommodated for Suffernigations, in Disorders  
incident to the Female Sex ; and the Decoction, used in Infes-  
fions, opens the Uterus, and exhausts its Humidities. The  
Wood has the same Virtues as the Fruit, only in a lower De-  
?reei Boil’d in Water, and drank, it helps Indigestion, the

lripes, the Bites of venomous Creatures, and Convulsions: It  
alfo provokes Urine, anil, with dry’d lris, is proper for Wounds  
of the Head, and promotes the Exfoliation of Bones. It is  
also mix’d with Ointments sor their Inspissation. *Diofcsrides,  
Lib.* I. *Cap.* IS. .

- .i ' t i . .BAI.sA.ii of TOLU.

' The *Balsam* of *Tolu* justly deserves our next Consideration,  
. frnce, in our own Days, ’ tis by many used as a Succedaneum to  
. the *Opobalsamum.* It is brought from the Town of *Hiobi* or

*Thlu,* in a. Province *of View Spain,* situated between *Cartha-~  
gena* and *Nambre de Dios,* and is yielded by a Tree resembling  
the Pine, according *toAay* in his History of Plants. It is. of  
the Colour of Gold, and smells llke a Lemon, especially if it is  
rubb’d betweenthe Palms of the Hands. It is dry, solid, and  
‘pellucid. *Tsuis Balsam,* dissolved in taruriz’d and highly recti-  
-fied Spirit of-.Wine,, affords an Essence, which is bothgrateful  
: and efficacious in several internal and external Disorders.

.. The Tree which produces this *Balsam,* is thus distinguish’d:.

**BALSAMUM TonUTAKUM, Ossic..** *Balsamum Tolutanum,  
foists Ceratiae senilibus, quod candidam,* C. Β. Pin: 40I. Chom.  
-Ἀ26. *Balsamum Tolutarium,* :Monr. Ind. Exot. 12.. Ind. Med.  
- I 8. *Balsamum 'de Tolu,* Park. Theat. I57o. J. B. I. 296.  
.RaiiHist. 2:. I75S. De Laet. Ind. Occid. 367. *Balsamum  
Provincia Tolu, Balsamisera, 4.* Hern. 53. *Arbor Balsarni-*

*'fora Tolutaria,* Jons. Dendr. 3o8. THE' BALSAM-TREE  
OF TOLU. ..... ---- -

*Balsam of Tolu m* brought to us -in small *Callibasees* from  
Τοἰιι, a Province*.iortlda.West-Indies.* It is. of. a tough resinous  
- Consistence, growing dry and friable by Age, of a yellow-  
brown Colour, of a most fragrant Smell, - and an aromatic  
Taste. Iris not certain from what Tree this is produced, forne  
.saying it is a small Pine-tree, others , a Tree refembling the  
: Carob-tree: . - - -

ri This is an.excellent pectoral *Balsem,\_A* great Service in Af-  
fections of the Lungs, as Coughs, Asthmas, Consumptions ; and  
what makes it more valuable is, that it has no nauseous oleagi-  
nous Taste, as most other *Balsams* have. It makes an agree-  
able Emulsion, with Sugar and the Yolk of an Egg. It is very  
- restorative, and good to strengthen the *Vesiculae seminales,* and  
: to stop old Gleets and Strains in either Sex.

The only officinal Preparation of this *Balsam is* the *Syrupus  
Half amicus- Miller's. Bot. Osts.*

- It is good to, deterge and consolidate Wounds ; it resists a  
*i* Gangrene, strengthens the Nerves ; is good for a Rheumatism,  
. or a Sciatica, being externally apply’d.

- The Dose is from one Drop to four Drops. *Eemery des*

*Dragues, ' , , "*

*Geoffrey* adds. Being held in the Mouth, it has no Acrimony,  
~ in which it differs from all the rest; and lor that Reason it is

prefemid for interstal Use,r heing given from ’ six to eight  
Grains. *Geoffrey.*

.The *Balsamic Syrup* is thus made;

Take of *Balsam* of *Tolas* two Ounces; and twelve Ounces  
of Spring-water, or any of the Peoloral Waters; Boil  
them together in a circulatory Vessel,.well luted, in ,a  
Sand-heat, for two or three Hours. Wherr the strain’d’  
Liquor is cold, dissolve in it twenty Ounces of fine  
Sugar, fo as to make it into a Syrup, without any Heat.

. This hath not been received by the College .till the last  
Emendation of their Dispensatory, but is added by *Shipton to*their former, amongst his *Additamenta.* The Manner of Boil-  
ing is very justly contrived to prevent any Loss of the finer  
Parts by Exhalation, which it would suffer in an open Heat:  
*Quincsu Dispensatory.. ’ .*

**'BALSAMUM PERUvIAKimi**

.The next I shall, consider, is,that which is brought froth  
*America,* and *New Spain in Mexico,* and is call’d *Peruvian* and  
*Indian Balsam* 5 the various Species and Differences of which  
are. enumerated by *Pomet,* in bis History of Drugs. Tt is,  
however,-commonly distinguish’d into two Sorts, the White,  
and the Black. The former is.accounted the best, and is, by  
way of Eminence, call’d the *Balsam of Paciston*; because,  
according to *Monardus,* it flows fpontaneousty from a Tree of  
a large Size, upon making a flight Incision in is. It is limpid,  
of the Consistence of Turpentine, of a fragrant Smell, and  
much scarcer and dearer then the black Sort; but. we are to  
take care, that it .is. not adulterated, with *Venice* Turpentince,  
and fold for the genuine *Balsam.'* The black Sort, of which  
great Quantities are imported tours, is, according to *Clufsus* in  
his *Comment, in Monardurn,* prepar’d and extractsd by boiling  
the Branches, Bark, and Leaves of the Tree. The genuine  
Sort is of a brownish Colour, of a. penetrating and fragrant  
Taste and Smell: It is also fluid, and the Whole of it is quick-  
ly dissolved in highly resisted Spirit of Wine. But it is to he  
lamented, that this very *Balsam* is, in our own Days, so com-  
monly adulterated, in all Probability with liquid Storax, or per-  
haps with the Feces which remain after the Preparation *oi Pe-  
ruvian Balsam,* that it is scarce to be found genuine any more  
in the Shops. -That which is adulterated, maybe easily distin-  
guish’d from the true and genuine Sort; for'the former is thick  
and coagulated, wants the penetrating Smell and Taste, and is  
with the greatest Difficulty dissolv’d in Spirit of Wine, but  
remains like a thick and oleous Magma. But of the true Sort  
very elegant Medicines are composed ; for when it is dissolved  
in highly rectified Spirit of Roses, it affords an Essence of ex-  
cellent Qualities., .When one Part of this *Balsam* is intimately  
mix’d, in a Mortar, with an equal Weight of Salt of Tartar,  
and highly rectify’d Spirit *of* Roses is pour’d upon it, upon heing  
subjecied to Distlllation in a Sand-heat, it affords a fragrant and  
delicate Spirit, which is a Medicine, of singular Efficacy, espe-  
cially if exhibited in a Solution of Amber or Music This  
Medicine, ufed internally, restores lost and impair’d Strength ;

and, being very friendly to the nervous System, it .powerfully  
contributes to remove those Disorders which arise from its  
Weakness: An extemporaneous *balscandc* Syrup, of many and  
great Ufes, may be made, by .mixing an Ounce of it with one  
.Poiind of Julap of Rofes. This Syrup is conveniently mix’d  
with stomachic and cephalic vinous Spirits : It also gives a grate-  
ful and agreeable'.Taste to Potions and Mixtures. If *Peruvian  
Balsam* is distill’d with the Worm and Refrigeratory,- it not  
only gives the Water a grateful Smell, like that of the *Balsam  
itself,* but also renders it nervous and diuretic. This Water,  
liberally drank; is of excellent Service in chronical Disorders,  
. arising from the Scurvy, and a Weakness of the Nerves,. ’Tis  
curious to observe, that on the Top of this Water swims an  
-ethereal and very sweet Oil,iwhich quickly incorporates with  
. highly rectified Spirit of Wine. ...

c The white *Peruvian Balsam* is thus distinguish’d. ’  
*, Balsamum Peluvianum album, seu Styrax alba,* ind. Med.  
: I8. . *Haaconex vel Balfamifera,* II. Hern. 52. *Balsamum  
t album.* Parse. Theat. I570. *Balsamum Peruvianum album,*. Geoff. Trad. 349. WHITE PERUVIAN BALSAM.  
*- Dale.* i

The black Bal fam is thus distingu ish’d

*Balfamum Peruanum,* Ossic. Ind. Med. 17. Mont. linos.  
. I2. *Balsamum Peruvianum nigrum.* Park. Theat. *15^0.*

*Balsamum ex Peru,* J. B. I. 294. *Histtzilexitl seu Arbor si 'al-  
. semi Indici, save Balfamif,era,* Hern. I. 3 I. *Haitiorloxitl*

*Mexicanorums* Jens. Dendr. 3o9. *Balfamum Hiutusschitl,* Laet.  
- hid. .Occid. 224. *Cobnriiba,* Marcg. I37. *Cabureiba Pifcn,*/(Ed. I648.) -57. *CabureibaJiveBalfamum Peruvianum,* Eiufd.

(Ed. I657.) II9. THE NATURAL BALSAM-TREE  
*Dale. . . . -*

( This black *Balsam os Peru* is of a warming, strengthening  
..Nature, comforting the Brain, and nervous System ; is ufeful in  
Asthmas, the. Colic, and Tains in the Stomach and Bowels.

Outwardly used, it strengthens the Nerves, helps the Cramp,  
and all kinds of Convulsions, and Contractions of the Sinews,  
old Aches and Pains; and is very serviceable in Cuts, and green  
Wounds. *Miller’s Best. Oof.*

*Pomei* informs us, thet tho *Portuguese* make an artificial Rni-  
sarn of *Peru,* which they sell to the *Dutch.*

*Hiffmcon* gives the following Processes on the *Peruvian Bal-  
sam.*

That the *Balsam* imported from *Peru in America* is possess’d  
of very singular and efficacious Qualities, is sufficiently obvious  
from its fragrant Smell, and aromatic Taste. It was at first  
only used as an external Medicine, hut, in Process os Time,  
some Physicians and Chymists began to. use it internally, some-  
times mixing it with Pills, at other times dissolving it in highly  
rectified Spirit of Wine ; and on other Occasions incorporating  
it with Sugar, or any other Ingredients they thought most likely  
to answer their Intention.

But, as far more powerful and efficacious Remedies than  
there may be obtain’d from it, by the Assistance of Chemistry,  
I shall here give an Account of the Processas I subjectsd it  
to.

First, by distilling it with common Water, with the Worm,  
I obtain’d a highly fragrant Oil, of a reddish Colour, and entire-  
ly free from all Ernpyreuma; but ’tis to be observed, that half  
a Pound of the *Balsam* scarce afforded half an Ounce of this  
Oil, which dissolves in highiy rectified Spirit of Wine, of which  
it requires a large Quantity to procure its Solution. When dis-  
. solved in highly rectified Spirit of Rofes, it is very properly  
mix’d with' the Essences of Amber, Ambergrife, and Aloes-  
wood, since by its means their *balsamic* and corroborative Vis-,  
tues, in Difeases arising from a Weakness of the nervous System,  
are considerably increased and improved.

. Secondly, from *Peruvian Balsam I* prepar’d a most pure and  
delicate Spirit, in the following manner r I intimately mix’d  
two Parts of the *Balsam* with one Part *of Salt* of Tartar, by  
means of Trituration and Levigation, adding a sufficient Quan-  
tity of the best Spirit of Roses. Then I subjecled the Whole  
to a regular Distillation from an Alembic, which was placed in  
moist Sand. Thus, by carefully keeping up the due Degrees of  
Fire, I drew off the Whole of the Liquor to Drynest. By  
this Process I obtain’d a Spirit of a fragrant-Smell, and grateful  
Taste, but which was still more valuable on account of its ana-  
septic and corroborating Qualities. I alfo observed, that this  
Spirit was very efficacious in promoting a Discharge of Urine, a  
Circumstance which renders it highiy proper for preventing sa-  
bulous and stony Concretions in the small Tubes of the Kid:.  
Ileys. One Dram of this Spirit, mix’d with three Ounces of  
the Julap of Roses, is immediately converted into a *balsamic*Syrup of singular Efficacy, and which is to be justly preferr’d to  
ail other Syrups, on account of the delicate and grateful Taste  
, it communicates to Medicines.

. Thirdly, I have, for several Years past, made very frequent  
Ufe of a volatile *balsamic* Spirit, prepar’d by an Affusion of  
highiy rectified Spirit of Wine, upon a Mixture of equal Parts  
of the volatile Salt of Ivory, Salt of Tartar, and *Peruvian  
Balsam.* This Spirit, on account of its difcutiont and dispho-  
retio Virtues, and its. Efficacy in restoring Strength, and a due  
Tone, to the Parts, is used with uncommon Success, in those  
Disorders incident to cold Constitutions, where ’tis proper to  
excite a brisker Motion in the Mass of Blood and Humours, and  
augment Transpiration; and Ido, with good Reason, affirm,  
that it is far preferable either to the Spirit of *Busseus,* as ’tis  
call’d, or to the *balsamic* Spirin *Hioffmanni Observ. Phystca-  
chyrn. -*

*The Manner of making artificial* Balsam of **PERU.**

Take fine Turpentine, white Frankincense, of each one  
Pound ; Oil of Ben, Olibanum, Labdanum, Gum Elemi,  
of each six Ounces; Lavender-flowers and Nutmegs, of each  
four Ounces ; Spikenard, Wood of Aloes, and Dragon’s-  
blood, of each one Ounce and a half; the small Valerian,  
, Orrice, long Birthwort, Acorns verus, Mace, Benjamin,  
Storax, of each one Ounce ; Zedoary, Galingals, Cloves,  
Cinnamon, Castor, and Mastich, *of* each six Drams:  
Powder all the Drugs grosty ; then melt the Turpentine,  
Frankincenfe, Gum Elemi, and Oil os Ben, over the  
Fire ; and, when they are dissolved, incorporate the Row-  
... ders; and when they are made into aPaste, put them into  
a Glass Retort, whereof one Part is empty-; and, after it is  
well luted and dried, set it upon a Sand-furnace; and,  
when the Matter begins to heat, there will flow a clear  
Water, then an Oil of the Colour of Gold, at last a black  
*Balsam,* tending to Red, which pome would have to be  
what we fell by the Name of *Black Balsam* of *Peru..* The  
Water is proper to he taken inwardly, by those who have  
the Falling-sickeess, -Convulsions,. Weakness of the Sto-  
. maced and to correol: Wind. The Oll is g0od for the  
Pally, Nerves that are wounded. Pains in the Joints,  
rubbing them with it hot. As to tbe *Balsam,* the fame  
V irtues with that -of *Peru* arc attributed to st. *Pomct.*

*a*

Foreigners, who read the Advertisements in our News-papers, -  
may reasonably he surprised at our Bills of Mortality ; for there  
is scarcely a Distemper incident to human Nature, but, accord-,  
ing to the Proprietors of advertised secret Remedies, may he  
cured easily and effectually by some or other of their Medicines,  
which are always taken from some Medicinal Writer. ' There  
are at least ten different People in Town, who get a very hand-  
fome Subsistence by selling a secret *Balsam .* which is the same  
as, in many Families, goes by theNameofthe *Jesuit’s Drops,*or *Frier’s Balsam.* It is much celebrated in foreign Countries,  
by the Name of *Bourne de Gomrnandeur de Berne*; and is really  
an admirable Medicine. . . .

*- Pornet* gives the following Receipt for its Preparation, which  
is said to be the best known.

**BALSAMUM COMMENDATORIS,, or** *The* **BALSAM** *of the  
Commander of* Βεκνε.

Take dry *Balsam* of *Peru,* one Ounce; Storax in Tears,  
two Ounces ; Benjamin in Tears, three Ounces; Aloes  
Succotrine, the best Myrrh, Olibanum in Tears, Roots

. of *Bohemian* Angelica, Flowers of St. JohnS-wort, of  
each i half an Ounce; Spirit of Wine, one Quart.; Beat:  
all together, and put them into a Bottle well stopp’d,  
which hang in the Sun during the Dog-days; at the End  
of which Time the Whole must he past’d thro’ a Linen.  
Cloth, and used for the Purposes under specified;

First, all Gun-shot Wounds, and such as are made with  
sharp Instruments, if they are not mortal, are cured in the  
Space of eight Days, by the Application of this *Balsam,* either  
with a Feather, Cotton, or by way of Injection, provided the  
Wound has been first of all dress’d with-it, and no other Medi-  
cines have been used ; for when the Wound is at first dress’d with  
it, no Pus will afterwards he form’d whereas the Generation of  
Pus is always the Effect os Dressing with the ordinaryMedicines.  
There is no Occasion either for Tents or Plaisters when this  
*Balsam* is apply’d, especially at the first Dressings. Upon its  
first Application to the Wound, it creates an intolerable Pain ;..  
but that soon goes off, and is no more fest. This *Balsam* **is so**admirable a Remedy for the Colic, that is four or five Drops of  
it are intimately mix’d with a Glass of Wine, and drank, the  
Patient’s Indisposition is soon offer removed/ It is also a fove-  
reign Remedy for the Gout, when apply’d to the Part affedled  
with a Feather or Cotton. In a Tooth-ach it is of singular  
Service, when Cotton,' soak’d in it, is apply’d to the Tooth  
affected. All forts of Ulcers, as also Cancers and Chancres, ,  
are cured by it. It is effedtual against the Bites of- venomous  
Animals, those of mad Dogs not excepted. It prevents Pitting  
by the Small-pox, if the Pustules are anointed with it as soon as  
they appear on the Face ., for it dries them before Pus is: form’d  
in them, upon which Circumstance the Pitting depends. It .  
proves, an excellent Remedy for the Haemorrhoids, if they are  
rubb’d with it when the Patient goes to Bed. It is excellent  
for Deflexions and Bruifes, if the Parts affeoled are anointed  
with it. Five or six Drops of it, exhibited internally, in sour  
or five Spoonfuls of Broth, prove an excellent Remedy for the  
Purple Fever. It is also good for sore Eyes, when put into  
them with a Feather. It is also excellent for Pains of the Sto-  
mach ; in which Cafe,'if the Patient is feverish, he must take  
it in Broth ; and if not, in Wine. It -cleaofeS the Stomach,  
and procures an Appetite. It must never he warm’d, but al-  
ways be apply’d cold, and it becomes dry as soon aS it is apply’d  
to the Part affected. Five or six Drops of it, taken in Wine  
or Broth, are ver}' proper for provoking the Menfes, when de-  
fective; and giving a Check to them, when too luxuriam.  
When we pour out any Quantity of this *Balsam,* we must stop  
-the Phial immediately after, to prevent its Evaporation: If  
any Wound has been previoufry dress’d with other Medicines,  
it must be wasti’d with warm Wine before the Application of  
this *Balsam,* which will cure it effectually, tho’ not so speedily  
as if the *Balsam* had been used at first. It cures Fistulas, how-  
ever old, and in whatever Parts of the Body. Five orsix Drops  
of it, exhibited in white Wine, or in three or four Spoonfuls of  
Broth, are an excellent Remedy for Fluxes and Haemorrhages.  
It is good for the Pricking of Horses, when shoed: By pouring  
a Drop or two into the Hole from which the Nall is drawn, **it**is cured immediately.

**BALSAM** of **CAFIVI.**

I now come to take a View of the *Balsam of Capiati,* or Ce-  
*pa iba,* which has universally acquired *so* uncommon a Reputa-  
tion. It is produced in *Brazil,* and brought to us in Earthen  
Vessels by the Way of *Portugal* from *Pio de Janeiro, Pernam-  
bouc,* and *St. Vincent.* It is of a whitish-yellow Colour, and of  
a fluid, resinous, and *balsamic* Consistence, like *Venice* Tur-  
pentine. It is of an acrid and somewhat bitter Taste, and.stowa  
from a Tree of a moderate Size, upon making an .Incision into  
its Bark. *Ray* calls this Tree the *Arbor balsamifera Brastlieasts  
fructu monospermo.* τόσυ Sorts of this *Balsam* are brought .to  
us, one of which is a limpid Liquor, which stows from certain  
Trees ia a Province of *America,* called *Copaiba,* when they are

perforated or pierced to the Pith., and this Sort is 0s2 fragrant  
and *very* grateful Smell, and of a Taste somewhat acrid. The  
other Species is thicker, and of the Consistence of Turpentine,  
But this Difference depends on tho different Times of gathering  
it; for that which flows out immediately after the Incision  
made in the Tree,' is very clear, white, and of a resinous Smell.  
But that which follows it is of a Colour approaching nearer to  
that of Gold, and of a thicker Consistence ; for which Reason  
it was first called a *Balsam:* And this last-mentioned Sort is  
what I said was brought to us in great Plenty, from *Portugal in*Earthen Vessels, hut the other Species is thinner and scarcer:  
- The Limpid is most highly esteemed, and thought best, both  
for internal and external Uses. When dissolved with Tincture  
**of** Tartar, it is successfully exhibited internally for a Fluor  
Albus, Gonorrhoea, and Disorders of the Kidneys and Bladder.  
Externally it is a fine Liniment, and much used for consoli-  
dating Wounds and Ulcers, and corroborating the nervous  
Parts, which have been weakened by the Shock of some Dis-  
ease. Its Virtues principally depend upon the large Quantity *of*Oil it contains, as is obvious from the following Experiment:

**I** took one Pound of the hast Sort of the *Balsam of Capivi,*and pouring four Measures of Water upon it in aStilfwith  
a Worm, and with a proper Degree of Fire, drew off six  
Ounces of an Oil of a pretty penetrating Taste, and plea-  
sant Smell, of a greenish Colour, and a pretty good Con-  
sistence. As I never knew an Instance os this *Balsam's*being fiibjmied to Distillation before, I could not help being  
surprised at the large Quantity of subtile and ethereal Oll it  
contained, especially since from the black Sort of the *Pe-  
ruvian Balsam* a very small Quantity of Oll was obtained,  
when it was subjectsd to Distillation by the Worm f which  
is a pretty palpable Proof, that this *Balsam of Capivi is of*a very warming Nature. After the Distlllation was at an  
End, there was a resinous thick Mass left in the Bottom of  
the *Still,* which, when put upon five Coais, diffused a  
pretty grateful Odour ; and I am of Opinion, that it  
would be a very proper Ingredient in such Plaisters as are  
designed for corroborating the nervous Parts. Though the  
*Balsam* itself is possessed of very signal Virtues, yet I disco-  
vered still more exalted and efficacious Qualities in this  
distilled Oll: I mixed some of it with a double Quantity  
of human Fat, which, when apply’d by way of Liniment,  
wonderfully strengthen’d pamiytio Parts, and such as were  
deprived of their Tone, Sensibssiry, and Motion.

Nor is it less beneficial and serviceable, when apply’d to Parts  
which are weakened, and become unfit for Motion, in Conse-  
quence of gouty Pains. From it also excellent vulnerary and  
pectoral *Balsams* may he prepared for internal *Die,* by mixing it  
-with well-prepared Oll of St. JobnS-wort, Sperma Ceti, and Oil  
of the Yolks of Eggs, adding a few Drops of the Oil of Sassafras-  
wood, Mace, and Fennel. When the *Balsam* is thus prepared,  
it is to be exhibited either in an Emulsion, or in Asses or Goats  
Milk. I don’t in the least doubt, but if this *Balsam* was jodi-  
-ciousty used. Patients who labour under -Impostumations of  
the Lungs, and Ulcerations of the Kidneys, Bladder, and Pro-  
statae, might receive very sensible Relief from it.

This Oil is very speedily dissolved in pure Spirit of Winfe, but  
sour Parts of it are required to one of thc-Oil, that the Solution  
may be the more throughly made. If instead of the Spirit- of  
Wine Tincture of Tartar or. acrid Antimony is ufed, and Spi-  
ritus Nitri dulcis added, a Medicine is produced which strongly  
provokes Urine, and is of singular Efficacy in Rheumatic Dis-  
orders and Cachexies. An Eheosaccharum of a *balsamic* Na-  
ture, and a more grateful Taste, may be prepared from it,  
which, when taken in *Spani/h* or *Hungarian* Wine, is an excel-  
lent Remedy in Cases where the Stomach has lost its Tone, in  
Coughs .which rend the Breast, and when the Intestines are too  
much relaxed or distended with Flatulencies; it is also of singu-  
lar Service in paralytic Disorders.

I must not on this Occasion forget another Use of this *Bal-  
sam..* As I found that it abounded so much with a fragrant  
Oil, I made the following Experiment with it

**I** poured half a Pound of it upon Lavender-flowers, as also  
upon Rosemary, by which means I obtained a large Quan-  
tity of Oil, which in Flavour and .Taste differed very little  
from the purest Oils extractsd from these Substances..

Hence ’tis sufficiently plain, that this *Balsam* may be more  
comrnediousty used than Turpentioe,'for increasing the Quan-  
tity of ethereal Oils in Distillation: Yet I do not advance this  
.with a View to persuade any one to follow this Practice, Hisse  
*. man's Observ. Chym.*

The Tree producing the *Balsam of Capivi* is thus distin-  
.guished:

*Capivus,* Offic. Pharmacopol. *Balsamum Copaiba,* Ind.  
Med. I8. *Balsamum de Copaiba,* Mont. Exon 12. *Copaiba,*Pison. (Ed. I648.) 56. (Ed. I658.) II8. Jons Dendr. 309.

Rail st1st. 2. I75ni *Arbor BalfamiferaBrafilionsesofrudu mar  
nosperrne,* Ejusfl. *Copaiba Brastlieastbus,* Marcg. I30. *Bap.  
farnum album.* Park: Theat: 1570. *Balsamum certarum qua.  
rundam plantarum, quas Copaibas vocant, J.* B. I. 306. *Bal-  
samum Copaiba, GeoS. Tracts* 348. THE WHITE AME-  
RICAN BALSAM-TREE. *Dale..*

When this *Balsam* is new, it is of the same Colour and Con-  
fistenee with Oll of sweet Adinonds, and stnells like the *Calam-  
hour* Wood, but the Taste is a little acrid and bitten

*Fuller* says. That when given in the Quantity of two Drams,  
it purges very well, and gives a very bitter Taste to the Urine.  
A Liniment may be made with two Parts of Spirit os Wine,  
and one Part of this *Balsam,* very proper to be used in Rheu-  
matisms and Palsies. *Geoffreys*

Pomet *gives the following Account of* Baume Nouveau, NEw  
ΒΑ15ΑΜ.

. The *New Balsam* in Colour and Shape is very like that of  
*Tolu,* but of a much less agreeable Smell. This *Balsam* is made  
after the same manner as the Oil of Bays, from a little red Fruit,  
that grows in Clusters upon a kind of Tree, the Leaves where-  
of are very large and broad, green above, and greenish under-  
neath, which grows in the *stscest-Indies,* especially in the Istand  
of .St. *Domingo. This Balsam* is so very scarce in *France,* that  
there is very rarely any of it to be seen. *Pomet.*

Among the several Simples of the *balsamic* Kind, we may  
justly reckon *liquid Amber.* It drops from a Tree of *Mexico,*called the *Arbor Styracisera,* upon an Incision being made into  
its Bark. It is an oleus, resinous, and pinguous Liquor, of  
the.Consistence of *Venice* Turpentine, of *z* reddish-yellow Co-  
lour, of an acrid, aromatic, and oleous Taste, approaching  
pretty much to that of *Storax Calamito.* Its Essence, extracted  
with Tincture of Tartar, or tartarated Spirit of Wine,  
strengthens the Head, and nervous System: There is also di-  
still’d from it with Water, by the Worm, a thin and fragrant  
Oil, which is of singular Efficacy both for internal and external  
Uses. SeeAMEKA.

Having taken a View of the liquid *Balsams,* with which Na-  
ture has bountifully supply’^ us, I come in the next Place to  
consider those which are of a more dry and solid Nature,. such  
as the resinous fragrant Gums, impregnated with an agreeable  
Oil: Of thefe the principal are Benzoin, pure Storax Calamita,  
Ladanum, Myrrh, and Mastich. These are produced by making  
an Incision in the Bark of *Balsam-bearing* Trees, which are al-  
ways green, at the hottest Season. From these Trees a tena-  
cious Liquor drops, which becomes gradually more solid, as its  
humid Parts are exhaled by the Heat of the Sun ;. for which  
Reason there resinous Gums are justly called dry *Balsams,* be-  
cause tn all Points they agree with *Balsams*; for their whole  
Substance is inflammable, they have a fragrant Smell, they are  
of a penetrating Taste, they are dissolved, though not totally,  
in highly rectified Spirit of Wined and yield an Oil, when sub-  
jected to Distillation.

And, first, as to the *Benzoin,* it is produced by a Tree os  
*Sumatra,* called the *Arbor Benurifera.* The purest Sort of it is  
white, and in highly rectify’d Spirit os Wine is dissolved into an  
Essence, which, when poured into Rofe-water, makes a very  
elegant cosmetic Milk., This Gum, by an eafy Sublimation in  
*a* Pot, is raffed in Flowers. If it is boiled in Water, and the.  
Decoction inspissated, beautiful shining Flowers fall to the Bot-  
tom, which are not only of great Service internally for promote-  
ing Expectoration in *Asthmas,* and removing Obstructions of the  
Lungs by their subtile acrid Quality, but also by stimulating  
the Nostrils they excite Sneezing. Besides,' 5i»zoin is the  
principal and most important .Ingredient in thebestand most  
efficacious Fumigations; and when duly mixed with an Extracti  
of Benzoin, with the Addition of some odoriferous Oils, and a  
. little Civet, it makes that *Spanise* Mass which is so much  
esteemed for the Delicacy and Fineness of its Smoke. See  
BENZolNUM.

*Styrax,* or, as ’tis more frequently written in *Latin, Storax,*is of the fame Nature and Qualities with Benzoin. It is found  
in *India,* and, according to *Labelius,* in fome Parts of *France.*It flows from a Tree which has Leaves like those of the Quince-  
tree, and a Trunk like that of the Birch, in the Form of Icicles,  
from which Circumstance *Lobelias* thinks that it received the  
Name of Styrax, though his Opinion does not seem to be suffi-  
ciently authorized. The purest Resin is called the Tears of the  
Styrax. It is very odorous, and divided into Grains and Lumps.  
It is also called *Calamita,* the Reason of which Name *Strabo*gives in his twelfth Book, which is, hecause it stow’d from a  
Tree excavated and hollow’d llke a Reed. The impure Sort is  
a Magma of a reddish Colour, in which there st often an in-  
termixture of Sttatvs and Leaves . and this Sort of it seems to he  
obtained, by boiling the several Parts of the Tree, especially its  
Branches,’ Bark, and Roots. We use to obtain the Resin from  
this Storax two ways, either by Expression, aster having mace-  
rated it sufficiently with a little Wine ; or by means of highly  
I rectified Spirit of Wine. See St o R Ax.

*. - Mtestith* is a Resin of a pale-yellow Colour, pellucid, of a  
resinous aromatic Taste, and of a highly fragrant Smell. It  
stows from an Incision made in the Bark of the Berry-bearing  
Mastich-rree. of which there is great Plenty in the Ifiand of  
*Chios.* That produced in *Chios* is the best , for that with which  
*France* supplies us is coarser and less pure. We have .prepar’d  
a Spirit of singular Efficacy, by distilling rectified Spirit of- Wine  
from two Parts of Mastich. intimately mixed with one Part of  
Salt of Tartar. \_ By this Process a most fragrant Spirit is ob-  
tained, which is of great Service in corroborating the Stomach  
and nervous System, and in exciting a Discharge of the Urine j  
for the Salt ofTartar proves an excellent Key, if I may so fpeak,  
to resinous Substances 5 since by its means their subtile volatile  
Oils are separated and disentangled from. their viscid earthy  
Particles, and left at full Liberty to exert their Qualities. See  
MAsTIeHEr . - - -

*Ladanum* is also a resinous *balsamic* Concretion, wrapt up in  
a spiral Form, of a somewhat bitter Tasse, and of a grateful  
fragrant Smell, especially when ’tis set on Fire. - in *Surin and  
Crete* the inhabitants gather this Gum from the Leaves of the  
true Ladaniferous Shrub. There are many small Grains of Sand  
mixed with it, hecause the Trees producing it grow in sandy  
Soils. With Spirit of Wine a most pure Reiin is extracted from,  
-it, which either in a liquid or solid Form is of singular Efficacy  
in strengthening the Nerves ; and I myself have often had Er4.  
perience of its Virtues in revere and obstinate Head-achs. See  
LADANUM. - ,,

*Gum Elemi* comes next under our Consideration, which is  
resinous, lucid, of a whiristi-yellow Colour, ductile like Wax,  
of an aromatic Taste, and fragrant Smell. It flows from inci-  
sions made in the Bark of the Myrobalan-tree, produced in the  
Island of *Ceylon,* the inhabitants of which Place kindle it in  
their Lamps, and ufeitby way ofLanthorn. From this Gum,  
with Water by the Worm, a very penetrating Oil, which is of  
singular Service; both internally and externally used, in Gonor-  
rheas, Wounds, and Ulcers, is distill’d. See **ELEMI.**

I o the dry *Balsams* belongs’ asso *Myrrh,* especially the purer  
-Sort, which is - intermixed with pale Spots, and is of an acrid  
.aromatic Taste, and of a fragrant Smell. It drops from a Berry-  
hearing Tree called *Pola,* which grows in the Desarts *A Arabia.*This is best and most properly given in Substance, mix’d .with  
/Sugar-candy, for removing all Putrefaction, especially of the  
Lungs. It is also an Ingredient in the most valuable Compo-  
sitions, such as the Elixir Proprietatis, the Piluhe Russi, the  
Piluhe Avicenna,, all rhe pompous Antidotes of the Antients,  
:ahd in short in Pills almost of every Kind. It is better to use it  
in Substance internally, .than by way of Essence, because these  
.are of a hot Nature, and generally put the Blood into too vio-  
lent Commotions ; but it is more temperate in Substance, by  
reason of some mucilaginous and gummy Parts mixed with it.  
Its Essence externally used is of considerable Service in the Cure  
of putrid Ulcers. See **MYRRHA.**

Having taken a View of the *balsamic* Guins and Resins,  
it now remains, that I direst my View to those Woods which  
are impregnated with a *balsamic* Principle, Among these, the  
first Place has universally been assigned to Aloes-wood, other-  
wise called Xyloaloes,. the Whole of which is resinous, of an  
aromatic and bitter Taste, and of, a fragrant grateful Smell,  
especially when reduced to Powder. It is the interior Substance,  
of an *Indian* Tree, called *Calamhach.* Its Resin is extracted  
with highly rectified Spirit of Wine, and .formed either into ce-  
phalic Pills pr Powders. And its resinous Essence, which is of  
the fame Efficacy, when mixed with Tincture of Mars, - consti-  
tutes a *balsamic* 'Hnctirre of Mars, whole Efficacy in removing  
Weakness of the Vifcera in hypochondriac Disorders is highly  
esteemed. Befules, I formerly have prepared, by Distillation  
with the Worrn, a Water of the Shaving of Aloes-wood, upon  
which a fragrant Oil floated, which, by being exposed to the  
Cold, was converted into a white Coagulum like Camphire.  
This Coagulum, dissolved in highly rectify’d Spirit of Wine,  
afforded an Essence of singular Virtues in strengthening the  
Brain, and repairing the Weakeefs of the Nerves. See AoAL-  
LOCHUM.

The *Lignum Rhodium* deserves to be next considered. Its  
Root is resinous, and of an aromatic Taste, and a fragrant rosy  
; Smell. It grows in the *CanaryAstande,* and, when'subjected to  
-Distillation, yields a very fragrant Oil, the Use of which is -  
highly extolled among the stented *Balsams.* Nor is it to he  
deny rd, that rhe Essence of th- Root of the *Lignum. Rhodium,*as also a Decoction of it in Water, are, by reafon of their *bal-  
samic* Resin, of singular Efficacy in Disorders of the Lymph,  
.and Diseafes arising from them, in a Lues Venerea itself, and a  
remote.and deep-seated Corruption of the Humours. See **RHO-  
DIUM** and **AsvALATHUS. . .**

\* The next in Order is the yellow Sanders, which abounds with  
a fragrant Resin : This is plain, from the Spirit of Wine drawn  
.off this Wood, which sinells almost like Amber. And if the  
Extract is made with rectified Spirit of Wine, and the Essence  
drawn off by a gentle Heat, a most fragrant oily Liquor remains,  
of the Conirstence of *Peruvian Balsam.* A Decoction of this

Wood is highly to he valued on account of’its penetrating Resist..  
See **SANTALUM. .**

Of the *balsamic* Barks, the principal are the Bark of the Safia-:  
fras-wood, Peruvian-bark, Winter’s-bark, that of Cascarilla,  
and the true Costus.l They are endow’d wish a resinous, *hast  
famic,* and fubastringent Principle, which is not only discover’d  
from their penetrating Taste and Smell, but allo from the highly  
peneirating Oil which these Barks yield .upon being distilled  
with Water, ,.νύ - '.

In the Northern Countries the Juniper-tree is truly os the  
*balsamic* Kind ;- for not only its Wood and Leaves, but especi-  
ally its Berries, abound with a fubtile penetrating Oll, which  
they yield in great Quantities, when subjected to Distillation by  
the Worm.; and this Oil, when pure and unadulterated, is an  
excellent Strengthened of the Nerves, and powerfully promotes  
.a Discharge of the Urine, as most other *Balsams* do. There is  
also a Decoction prepared of the Wood itfelf, which is ofsingu-  
lar Ufe in the Cure of the Scurvy. But besides the Simples al-  
ready mentioned of a fragrant Smell, and penetrating Taste,  
with which Nature has bountifully furnished us, Oihe also of  
the fame Qualities ought to be ranked among *Balsamics,* or *Bal-'  
sums s* For what else are subtile ethereal Oils, than liquid Resins,  
or liquid *Balsams?* For the principal Element, which is the  
.Source of the fragrant Smell, the penetrating Taste, and heal-  
ing Quality', by which all *Balsams,* whether liquid or stolid, act,  
is no other than a fubtile volatile Oil, which being taken  
awayi the Substances in which it was lodg’d become effete and  
ustlcti. '. ἐν

For this Reafon it may be asserted for Truth, that all those.  
Aromatics which in Distillation yield a fragrant and penetrating  
Oil, ssicti as Cinnamon, Cloves, Nutmegs, Mace, Cardamoms,  
Cubebs, Lemon and. Orange-peels, are justly to be ranked  
among the principal of the *Balsamics y* for this very Reason  
*Valerius Cordus,* in his Dispensatory, orders Oll of Cloves to be  
used as a Succedaneum to the *Qpobalscmium,* in all the Anti-  
dotes in which it is ordered for an Ingredient. “ There are  
“not,” fays he,." in our Days, *Opobalsamum, Carpabalsa-  
iL mum,* and *Xylobalsamum,* to he found, which come upto

the true Descriptions given us of them. ' But as we are  
-“ taught by Experience, that the Oil of Cinnamon and Cloves  
" distill’d in our manner, of which the Antients were ignorant.,.  
“ are equal in their Virtues to the *true Balsam*j for this Rea-

son we have, in our *Theriaca,* substituted the Oil of Cloves  
insteed of the *Opobalsamum.* It would not. he improper to  
“ substitute, instead, of *Carpohalsarnum,* Cubebs or Cloves, or  
“ Cardamoms, and Aloes-wood, instead of the*Xylebalfamampe*

There aromatic Oils, then,' are subtile 'spirituosisRaascnis, of so  
.uncommonVirtucs and Efficacy, thet the other, oriental *Balsams*tan scarce he expected to corne up to them ; for thefe produce  
their Effects only by a subtile Oil: . Neither is in difficult to re-  
duce thefe very penetrating and liquid Oils, either to the Con- '  
sistence of a *Balsam,* or to the Form of a Resin, provided a  
concentrated acid Spirit, such as Oil .of Vitriol, be duly mixed  
with them. ... ... i:;rr.i ... .: ”

In our own Country there are also spirituous *Balsams* of this  
Kind, which, both on account of their Virtues and Fragrancy,  
render it a dubious Point, whether they are not of equal Value  
with the oriental *Balsams,* and aromatic Oils. : And these *Bal-  
sams* produced in our own Country are Oils distill’d frornaro-  
matio Herbs, of a fragrant Smell, and penetrating Taste. The  
principal Herbs of this Kind are Rosemary, Lavender, common  
Spike, Marjoram, common andsshisii/h Bawm, Basil, Mother  
of Thyme, *Pitman* Chamomile, and aJJ the Species of Mint,  
-Water-mint, .Costmary, Field and Mountain Calamint; curled  
Mint, that Origanum commonly call’d the wild Marjoram.  
There Herbs, when duly distill’d, yield very fragrant and effi-  
cacious Oils. Bub as thefe Osts are rarely to be met with pure  
in the Shops, but are adulterated in their Distillation with Tur-  
pentine,, it happens, that they do not discover that Efficacy of  
-which, the.genuine Sort are possessed, in corroborating the Tone  
of the Nerves, and of the other solid Parts. They are most  
conveniently'used when dissolved and reduced to Essences; and  
*Quercetan,* in the End of his *Pharmacopoeia. Restituta,,* has  
these remarkable. Words concerning.them : In *Germany* an  
" Expedient is lately found for reducing the penetrating Oils  
" into pure and grateful Essences,' which preserve; the Colours,  
" Smells, and Tastes, of the particular Osts,; without any

other Mixture than the *celestial Manna* west perilled, which  
" extracts, the Virtues of these Oils, and by its Admixture  
. "" proves an excellent Corrector to them.” There is no  
.Doubt but the Menstruum, to highly commended -by this Au-  
thor, is highly rectify’d Spirit of Wine,, prepared, according to  
Art, for a thorough Dissolution or these Gils. i\_-

From what has been said, I think it plainly.-appears, that  
the Vegetable Kingdom supplies us with the noblest and most  
-efficacious. *Balsams,* which, when skilfully used, are .of singu-  
lar Service in curing Diseases, and preserving Life and Health.  
.’Neither'is if, in the last Placed to be forgot, that *majbalsemia*, Plants ano Trees, produced by the bountiful Parent of the  
. human Race, for their Comfort arid Preservation, are .distin-

**gnisheespas. it were, by an exsernal Mark or Characteristic,**expressive of their latent -and inherent Efficacy against Conup-  
rion, and -consequently ***os*** their ***balsamic*** Nature ; and this  
Characteristic is, that almost all-of them flourish perpetually';  
and are what we.cal.l Ever-greens.. We are also.on thisOc-  
oasion to- inquire, whether Heaven, who - in all her Measures  
iconsultstheintereft-of Mankind, has not ***ffisliEIalsums*** sor the  
-Presen'atiantis-the human Species.imder.ihe Barth; imdin the  
Bottom-ofthe Sea. . .It thenwimdssigetitiyinquire into the Na-  
tures of the Bodies lodged there, we shall find two' dry ***Bal-  
sams*** hid under she earth, and diffus'd thro' the Seas; which  
sseein -to yieivxith the other ***^ismns spmcuPi*** froth the Vege-  
table Kingdom. These are ***Amhergrrse,*** which in the Eastern  
Countries -is very ***-sine,-*** and had in great Esteem ; and the ***Ant-  
her*** produced in Northern .Climates. Both of them furnish  
us with ***balsamic-*** Medicines, ***which*** produce very instantaheous  
and speedy ESects. ‘. As for Ambergrise, it is amost fragrant,  
resinous Substance, the Whole of which is diflolyed in a parti-  
cular Menstruum, and reduced to a valuable Essence, which  
is free from all Precipitation or Coagulation os the Amhergriset  
It powerfully .restores lost Streogth, in of ed refreshing Nature,  
and by its grateful Ethalherons,imtigates'Pains, and procures  
sound and uninterrupted Sleep.; It is also wonderfully agreeable  
when mixed with spirituous Waters, or Waters impregnated  
with Sugar. But the ***Amber,*** which abounds with a subtile,  
fragrant Oil, closely sheath'd up on its Viscid earthy Parts,  
with Difficulty yields its O3,'when distillss vzith Water .‘but  
requires-a.strong Fire immediately applyYl‘to st, to which it at  
last yields, and affords a large'"Quantity Of an dnpyreumatic  
Oil, which, when rectiiy'd; and snfficiently'depurated, may ne-  
vertheless he used with great Success in Physic. But Iknowa  
Method of extracting from Amber .a fragrant OH, without de-  
stroying the Texture of ***slum Amber.*** This Oil is procur'd by  
beating it with welhcalcin'd Salt of Tartar,.: adding highly  
rectify'd Spirit of Wine,, and subjecting the Whole to Distflla-  
tion : Thus a very fragrant Spirit is obtain'd, which is of great  
Service-in Weakness Of the Nerves. If we again pour this  
Spirit upon pure ***Amber,*** mixed with Salt of Tartar, an Essence  
much more-fragrant, and more penetrating, than the common  
Essence; .rises on the Topi.""- i- .

These then are the natural ***Balsums*** known to us, which  
are certainly fine Preservatives of Lise and. Health, and from  
which a skilful Physician may, by a Judicious Mixture of other  
Substances prepare the best- and most efficacious -Medicines.  
For this Very Reason we find the best ofthe Czret and ***Arabian***Physicians,- mixed their most Valuable Antidotes with these

’ Oils, as we . see in the Dispensatory - ***Of POlcrises Cordus,*** the  
***Pharmacepcea' Augustana,*** the***Pharjnacepcea Bclorcadcri,*** and in  
several other Books of a like Nature ; and generally almost all

„ the above-mentioned ***balsamic*** Species are. made Ingredients in-  
the ***Theriaca Andromache,*** and the Mithridate. ***Mefue*** also,  
and ***Nicolaus, masse*** much Use of these Species, especially, as  
Cordials, as appears from ***MesuFs*** Description df Cloves. See  
in the Dispensary ***os Fas Cordus,*** the ***Species Diambra*** ; the.  
***Species Cinnamomi os Mefue,*** the ***Spectes Diaxyioaloes ;*** the  
the ***Aurea Alexandrina css Nicoldies,*** and the ***Species Lkiacastorei,***ofthe same Author.

Besides, these ***balsamic*** Species were with Success Jom’d by  
the Antients to laxative and purgative Medicines; for they  
-thought, that the violent Strength of Purgatives was unfriendly  
to Nature, and stood in heed of a‘ Corrector, winch might  
strengthen and corroborate her.. For which Reason the ***Ele-  
ctuary*** of ***Mesuc,*** (see ***Cordusst*** the ***Diasena*** of ***Nicolaus,***his ***Hicra Picra,.*** the ***Hicra Simplex*** of ***.Galen,*** the ***Psell, de  
Hicra Composita*** of ***Nicolaus*** ; the ***Pil. Hicra Picra Rljasis ;***the ***Pil. Aleophanginee*** os ***Cordus,*** .and the ***Pii. Lucis majores,***

- have in their Composition a Very considerable Quantity of the  
aromatic, ***balsamic*** Species/ And, not to dissemble, these lax-  
ative and purgative Compositions of the Antients, provided  
they had a smaller Quantity of the purgative Ingredients, which  
1 lay down as a general Caution,, but especially os the Aloes,  
are sar superior to ours in point of Efficacy. And some of the  
most noted Pills invented by later Authors, such as the ***Pil. de  
Succino Cratonis,*** the ***Pil. Catholicae Potcrii,*** and the ***Pil.  
Becherlaneae,*** which are now so much esteemed and corrected  
in Various manners, would never have gain'd that Reputation  
they now have, unless in them a moderate Dose os the purga-  
five Ingredients, especially of the Aloes, was incorporated with  
***ialfamic*** Gums, and Extracts of Vegetables.

The ***balsamic*** Species are also excellent Correctors to Me-  
dicineS of a stupisying and narcotic Quality. For this Reason  
we find, that the Antients always mixed, them with Opiates ;  
because they imagined, that by their means the cold Qualities  
of Opium, and other Narcotics, were\_. destroy'd ; and the  
Spirits, when said afleep by them, roused and render'd active;  
and undoubtedly the ***Pil. de Cynoglesse*** could not he so safely  
’ used, unless the Root of the Hounds-tongue, the Seeds of the  
white Henbane, and the Extract of Opium, were mixed with  
Myrrh, Olibanum, and Refin of Storax. Nor would the  
***Pii. de Styrace*** he fo effectual in diflodging acrid Humeurs in

‘Coughs and Catarrhs, Unless they had at the lame time in  
their Composition ***Olibanum,*** Resin of ***Storax,*** Myrrh,, and  
Amber. The ***Pip. IVildegansti*** are by having in their Com-  
' position a Mixture of the Oil of Cloves, Myrrh, and Aloes,  
“esteemed sar more safe than any other Preparations of Opi-  
**urn.** The ***Ladanum*** of ***Sydenham,*** which is much used,  
pot only in ***England,*** but in other Countries of ***Europe, is***shot a little corrected by the Addition of these aromatic Suhe  
'stances. Cinnamon, Nutmegs, Cloves, and Spanish Wined  
The ***Elixir Proprietatis,*** invented by ***Paracelsus,*** and the  
***Pil. Rofsi,*** and. ***Pil. Avicenald,*** prepared of the same ***Spicies,***"have retained their Reputation sor a great while ; because by  
the Addition'os Myrrh, which-is of a ***balsamic*** Nature, and  
Saffron, the cathartic Violence of the Aloes is much corrected  
and subdued. In- the mean time it were to he wished, that  
"all these Preparations of the Antients, in. which Aloes is ad  
Ingredient, contained a smaller Quantity of it ; since by their  
.sulphureous and Volatile Acrimony, they put the Mass os Blood  
-and Humours into too strong Commotions ; and in hot Con-  
stitutions often do more Hurt than Good. Besides, the ***Wise  
mens Waters,*** and ***Elixirs of Life,*** as they are called, the ***Bal.,  
farna Embryonum,*** the. spirituous apoplectic Waters, the apo-  
plectic Spirits and ***Balsams,*** and the het cephalic Waters,  
which are made up of the best ***Balfamies,*** Aromatics, and cepha-  
lic Heths, which abound with a subtile, ***balsamic*** Oil, do from  
thence principally derive their Virtue in restoring Strength,  
and corroborating the Tone of the Viscera and Stomach. But;,  
fince the Antients Compositions of Medicines, on account of  
their:Ignorance of a just Physical Theory, are, for the most  
part, improper and trissing, hecause they were not only un-  
acquainted with the true Causes of Diseases, but also with the  
Manners in which Medicines'operate ; hence it is undoubt-  
edly certain, that Medicine heing in our Days placed in a  
fairer and more rational Light, better and more proper Forms  
of Medicines may be I corii posed. Since then ***bals.amic*** Medi-  
cines are,'as it were, universal. Sfrengtheners of Nature, and  
since in every Disease there is a Necessity for comforting Medi-  
cines, it will be heth. profitable and entertaining, on this Occa-  
sion,. to. give some Examples of the Use of ***Bals.amics.***

First, then, ***Bals.amics*** are Very properly mixed with evacu-  
ating Medicines, not only in order to correct their drastic  
Qualities, but that the Force of Nature may be assisted in peril  
forming the seVeralDkcretions, and that Strength, which Eva-  
cuante generally impair, may he preserved. For this Reason  
they are Very properly mixed with Emetics. Thus I use a  
***balsamic*** Emetic Aqua Vitin, which Patients not only take  
with Pleasure,: but which produces the desired Effect ;, for it  
operates quickly and easily, without doing the least Injury to  
the Appetite, .and Stomach.. But the following may he used as  
a’Succedaneum to it, which consists of spirituous Mint-water;  
and Cinnamon-water distill'd with Wine, of each half an  
Ounce; to which two Grains of emetic Tartar, and one  
Dram of the ***balsamic*** Syrup, are to be added. This makes **a**Very agreeable Potion to he taken at one Dose.

if any one intends to use evacuating Pilis, which shall at the  
same time be possessed of a corroborating and ***balsamic*** Quality,  
he may use the following Form.

\*:Take of the Extracts of rosated AloeS, CarduUS BenedictuSJ  
' . and Wormwood, each one Dram ; of the Extracts of

- Rhubarb, Ladanum, and Aloes Wood; and of the Pow-  
ders of Benzoin, of the best Myrrh, and of the Bark  
.of Cascarilla; and of ***Peruvian Balsam*** and Nitre, each

- - half-a Dram. Let these .he mixed up into a Mass for  
Pilis, Of winch one Scruple is sufficient for a Dose,

If they are required inore acrid; set an Addition be made;  
either os the ***Extractum Panchyrnagogurn*** of ***Crollius,*** or of **the**Refin of Jalnp, intimately mix'd with Mercurius Dulcis;  
When the Nature of the Disease calis for a purgative Infusion  
join'd to ***Balfamies,*** the following is a proper Form.

Take Of the fibrous Roots of black Hellebore, of the best  
Rhubarb, and of Zedoary-root, each half an Ounce j  
of the Troches of Aaric, Cinnamon, Cloves, of the  
Barks of Sassafras and Cascarilla, os Lemon and Orangea  
peel, each two DramS. To these add two Ounces of  
- . Currants, and os crude Tartar, and Salt of Tartar; each  
three Drams. When all these are sufficiently mix’d, and  
beat small, let one Dram of the Spirit of Sal Ammoniac  
he sprinkled upon them. Then let three Pounds **of**‘Wine he poured upon the Whole.

If the Patient labours under hypochondriacal Disorders, FIN  
ings ***of*** Steel may, with great Advantage, be added in this  
Formula. ***Balfamies rosy*** also be very properly mixed with  
Sudorisics. For this Reason the depurated Volatile Salt of Hartse  
horn, distill’d with such an Essence of Amher aS I have above  
descrihed, is of excellent Service in promoting Perspiration, and  
provoking Sweat; sor hence a most penetrating Spirit is  
produced, which is still meliorated thy an Addition of ***Peru\*  
vian Balsam,*** This is so Valuable a Medicine, that scarce any

.Sudorific is equal to it. Fifty Drops may be given-for a Dose .;  
but we may Venture to go- farther, if .Circumstances re-  
squireit. . .. . .. . , δ᾽

.. If any one intends to host the *balsamic* refinous Woods, and  
sprocure then Virtues in a liquid Form, let him use the follow-  
ing Method. . - ’ " .

' - Take of the Shavings of the Woods of Sanders, Rose-wood,  
Junipers Sassafras, and Lignum Vitae, and of the Root  
of Sarsaparilla, each one Ounce ; of the Roots of Brunet  
and Angelica, of Cinnamon, Cloves, and Shavings of Aloes  
Word, each two Drams; Mix these sufficiently-toge-  
ther, and boil them in a close-stopp’d Vessel; . ssss

.. Many chronical Diseases require a plentiful Discharge of  
ferine; for answering which Intention, the following Medi-  
cine is os all others most proper. ssss

*. —s. \* \* ' \* ' e I... . : ..*

. Mix equal Quantities of the Spirit of Mastich, the Spirit, of  
*Pcruvian Balfam,* acrid Tincture of Antimony, andSpsa

. ritus Nitri Dulcis. Of this Mixture; half a Dram may  
. he exhibited with singular Advantage,, *Λ*

.. ' ' . . '. »f

*. . - - . ... . . l* . .V .... *si..T\_* Lsslam 00. .i ’ ... φύὸ Ο.. '1

In Disorders os the Head and Nerves,. irgni sometimes proper  
to irritate the Nostrils, in order to extract the Mucus,: and: ex-  
eite Sneezing. This intention is .exceheutly answer'd by the  
following Form. . *e* .\_ . .... \_ j ...

: Take, of the Powder of Marjoram,, and Basil, each one  
Dram ; of true Marum, and Shavings, of Aloes Woed,  
.t each, half a Dram ; Flowers of Benaoin, twelve Grains ῖ  
.... Essence of Amber,'.ten Drops;; Oil of Cloves, four

*... Drops.* MiX all together, j ; . ;. .

. It sometimes happens, that in the Cure of Diseases we are  
to have a. regard to the Patientis Strength ; because nothing is  
more dangerous, or inconsistant with Health, than .that the  
Strength should he too much impair'd. For this Purpose  
Analeptics are to he used, .Of which the best may be prepared  
in the following manner. . ; ... ' - . ; *so- s l*

' ~ Mix in equal Quantities the' Spirit of *Peruvian Balfam,* and  
the Essences - of Amber and Mush, prepared with the  
/ strongest Spirit of Roses, adding a small Quantity of the  
Oils of Cinnamon; of Cedar, Bergamot, Turkish Baum,

/ ' or other Oils of a like Nature. .

. The Reputation of the *volatile oleaus Salts* is very great ;  
and then Efficacy, when judicioufly used. Very singular. If  
you desire to communicate a *balsamic* Quality to them, it may  
he done in the following manner. -- . -. st . .;

. Mix of the Tincture of Tartar, and of the vinous Spirit os  
Sal Ammoniac, each an Ounce; add of the Oiis of Ce-  
dar. Mint, Mace, and Cloves, each ten Drops.

: \* This Medicine is of singular Efficacy in strengthening the  
Stomach, and restoring the Tone of the Intestines. The sto-  
machic Elixir, winch that skilful Practitioner *Michaelis* at *Leipr  
sic so* frequentiy used, was entirely composed of *balsamic* In-  
gredientsI For the same Reason *Balsumics* enter the Compo-  
sition Of my *balsamic Elixir,* a Description of which is to be  
sound in Jr. I 86. and 882. of my Annotations on *Potcrius ;*fince the Publication of which Book it has been received, into  
several of the Shops *of Germany.* See ELIXIR, and VITAE  
**BALSAMUM..:. . .... . δ᾽**

It is sufficiently known how.effectual *balsamic* Medicines are  
ip curing the Disorders of the Glands, and removing those Dis-  
heders which arise from their too great Laxity, a Defluxion  
of Humours upon them, or too copious a Discharge os their  
Contents ; for which Reason the following Medicines are of  
singular Service in a Gonorrhea and Fluor albus. - - -

. Take os the acrid Tincture of Antimony, of the Essences  
. of the *Balsams* of *Meceha, Capivi, Pcru,* and of the  
Woods, each half an Ounce. Mix all together, and add

- .one Grain of Camphire,

But I must hero give a Caution, that neither this Elixir, nor  
any other Medicines of a hke Nature, are to be nfed till the  
Body has been sufficiently prepared by necessary Evacuations.  
If a Medicine is defned ut a more solid Form, let Pilis he pre-  
pared m the following Manner,

^Tale os the *Balsusus Oq Capivi* and *Tolu,* of Amber, Ma-  
Inch, . Olibanum, japan Earth, Terra Sigillata, Dia-

... Pheretic Anmnony, and prepared Coral uach one Dram ;  
/ Oil os Sassafras, ten Drop.

.When these aye duly mined, let be made int0 pills

with the *nuls.amtc* Syrup. These Pilis are surprisingly effica-  
cious in Gonorrheas. t 07

*Balsumics* are also excellent. Pectorals, because they remove  
Obstructions of the.Dungs, promote Expectoration, and won-  
derfully strengthen the pulmonary Vesicles. For answering this  
Intention, the . inflowing Formula may he prescribed.. -

. i Take of Benzoin, Myrrh, *Peruvian Balfam,* Saffron, Nut-  
'si . megs,. Tincture os Tartar, Gum Ammoniac, each two

Drains dur .Oiis of. Anise, Mace, and Fennel, ieach ten  
Τ Drops'; Ppirit *os;* Sal.: Ansmopiae may also he added at  
scsi pleasures\* "si‘. sq si sc'sc.fr *sc. -etsei* oris 6'

Y Nor is st improperto make *supsiBalfamics in,* the Form of  
.Pilis, with other Ingredients, against an Asthma, for: the Use  
Jos such as sabour under that Disease. Let the sollowing For-  
squin be im Example of this Kind. . si ,

Take of Guin Ammoniac, the best Myrrh, Benzoin, has-  
( -- fron, *Pcruvian Pals.aati-Zati* Extract of Elecampane, each  
- νύ ' hals a Dram : Add of Powderof 'Millepedesp and depu..  
ινύ rated -Nitre', each one Scruple. ' - τ ' - ι

*...... ..... .a .. a* I .ι ι... of A-\* »-\*\*.\*.. . . a . . *L .... .. .\**

-An If any one intends to relieve the.Pains arising from the Stone  
in the Kidneys or Bladder, he may expect considerable Sue-  
hess from *.Bals.amics*; and. for that Purpose niay exhibit one  
Dram of'the: sollOwing Powder either in Almond-milkr or in  
Broth..' - .νύςλ set: .:ἄκ..Η c -. . th

L^Take of theTIower of Club-moss, and Seeds *as* Gromwell,  
' i i sos Pesch-kerneis, of Liduorsee-powder; CrabsTeyes, Am-  
ber, and Mastich, each one Dram. Let theni he jprinkled  
ῖ with a few Drops of the Oiis of.Saffasrai,' Mace,’ and Ju-  
nines," ss. " ’ ' -ι.-.- ίι' .... . . . . .. ... .. . ...

, When the Menses are disorderly, either in point of Defect  
or Excess ; or when frequent Abortions, or. Sterility, cutoff  
the Prospect of a 'hepesus Progeny, the relaxed Tone of the  
Uterus must in these Coses be corroborated, that Nature , may  
be render’d sufficient for overcoming and eliminating whate  
ever is noxious, and providing a proper Receptacle for cherish-  
ing and bringing to Perfection the Foetus. . This Intention  
will, in my Opinion, he excellentiy answer'd by the following  
Formula., .... ... . ... - - ' „ ’ ς

. Take οΓ.the Herbs Baum, Costmary, Paul'S Betony,  
Peny-royal. Yarrow, Rosemary-flowers, Lavender, and  
Sage, each . an Handful ; add of Lemon and Orange-  
j peal, of the herst Myrrh, and Juniper-berries, each two  
.. Drams. . . Let ail these be macerated in a proper Quantity

of Water, or rather Wine, which seems to answer the  
Intention better. - / . ' l .

\*- The Physician is to judge whether the Patient'S Case cash  
for the AdditionOf a Laxative, of which Class Rhubarb/ and  
the Leaves of Sena, are the most proper.

It now remains, that ! say something concerning thevnine-  
rary *Balsams,* since these are of incomparable and extensive  
Use in Wounds of the Intestines, and when any of the ex-  
ternal Parts are corrupted or destroy'd. ’' But I shall communi-'  
cate Io my Reader one, which is of all others the most effica-  
cions both for internal and external Purposes, and which I pre-  
fer to the celebrated English *Balfam,* which takes its.Naine  
from *Locatellus.* It is prepared thus

- Take of he Essences of Myrrh, Amber, Gum Elemi,, red  
. . Sanders, *Balfam Css Pcru and Tolu,* each one Ounce ; of

the Oils .of St. John's-wort, Yarrow-tops, and Balsa-  
ί mtna Mas. From these intimately mix'd, we draw off  
, the Spirit with a gentie Fife, and what remains we use

for the Purposes, and in the Manner, above specified. -

We also prepare.a Vulnerary Essence to he used externally in  
cleansing and incarning Wounds. It is made

i Of equal Quantities Os the Essences, of Yarrow, St. John’s-'  
wort. Myrrh, Amber, Mastich, Gum Elemi, *Peruvian  
Balfam,* and Flowers os Roses, mix'd together ; we .some-  
times also add Honey, winch proves an Ingredient os con-  
siderable Efficacy..

In how great Esteem compound *Balsams* were antiently had,  
both for internal and external Uses, appears plainly from *Con-  
radus Gefneofs Thesaurus de Remediis Secretes,* which proposeS  
many excellent *balsamic* Compositions, prepar'd of Aromatics,  
Resins, and Gums, of a fragrant Small, which were highly  
esteem'd by the Antients. From that Book it plainly appears,  
that the Time when Chymistry hegan to flourish, and'he dili-"  
gentiy cultivated, those *Dalfams* were principally in Use, which  
were procured by Distillation from the noblest Ingredients with'  
which rectisy'd Spirit of Wine and Turpentine were mixed. I  
shall only give one Example of this Kind from *Lully ,* and  
tho' the Composition wants the Turpentine, yet the rest of  
the ingredients are incomnarablV excellent. ‘ It is aS folios”..'

Tike of Cloves, Nutmegs, Ginger, Zsedoary, Galan gals,  
.. -Pepper, Juniper-herrieS, Lemon-peel, Sage, Basil,-Rose-

. marv, Marjoram, .round-leaved Mine, Bay.herrieS, Peny- . \*  
. inoyal,. Gentian,^ Calamint, Elder -and . Rose-flowers,  
... BishopSrweed, .Spikenard, Aloes-Wood, Cubebs;" Carda-

moms, Cinnamon, Sweet-flag, Steechas, - Germanders  
: Ba win, Mastich,'Hepatic Aloes, Seeds -and Flo werrf. os

shill, and Seeds: of Mugwort, each an Ounce ; all these  
. . are to: he put into-.three times their Weight of five-or fix  
... limes distill'd Spirit of:Wine, and to he dishU'd by a flow  
-. .. Heat,, upon which they yield a pure and-preciousWater,  
.- some of the furprifing Effects of which are- said to the these  
v:sollowing. *s ' ’’ suet'--ys*

Τ If ispir pour'd into *lz-* recent -Wound, there is tho Occasion  
for any Other Medicine, since it will heal Jtlin the Space of a  
natural Day and an half, at.farthest, provided *it* in not mortal:  
Malignant,.-told, ’putrid, arid -fungous Ulcers, jfiwash'd with  
this Water, are heal'din.afew Days..: If theEye is inflam'd,  
or has a Specheon tt, these Disorders are cured in a few Days by  
dropping^ little of it into the Eye affected. Im Pains, without  
ate Ulcer, arising from Blowsor.Falls, let the Part affected be  
fomented, .with A. small Quantity of it, and the Pain will -be?  
removed in the Space of three-Hours... Ilon internal Use was. sor  
highly esteem'd, that the following, shrpristng Accounts are  
given of it: It restores Youth to old Men ; it recovers Patients  
when ar the Pointos Death,.and given over by the Physicians:  
If a few. Drops ofinare drank every Day for a Year, with Bool  
rage Fsower-water,t the Patient shall at the-Yheols-end seem to  
have his Flesh, Blood, and, in a Word, hiswhode-Body,:re-I  
new’d..- In the above-mentioned Book there are many *Balsams*ekoellentiy composed, but we are to observe, that: almost ail.of  
. them haveTuspentine for an Ingredient,;, which affords an Oil  
somewhat ungrateful to .Nature, hecause by its: too great Heat  
It. agitates the Blond; and puts it into preternatural Commo-  
tions; .for yvhinh .Reason Lam of Opinion,; that the-Turpen-  
nine into be lest out of all the *Balfamsuxsi-* spintuous.Wateryof  
the Antients- ' ' " \* - . fiιμά. .. t ... ,.οῦ  
. I shall here briefly rnake mention of my own liquid spirituous  
*Palsuni.os.* Life, which, son account of its surprismg and essica-  
clous Qualities, has in'many Places acquired an unoommop Re-  
putation. The Efficacy of this Composition consists in a Solu-  
tion Of the purest' Oiis, and Unadulterated *Ealsums,^* mixed-in; a  
due Proportion; imd this Purity os .the Ingredients is the Reason  
why this *Balsam* is possess'd os such uncommon-efficacy, aS is  
scarcely to he met with in .any other Medicine '.whatever. See;  
**VITAE BALSAMUM. '** - ; δ᾽. ί’ ' .'Isi. "... ῖ τι-

I now come, in\* the last Place, to deliver my Sentiments  
concerning theWirtueS and. Efficacy of what we call *balsamic*Medicines. .Tiffinn, then; that these are truly universal, and  
of extensive Use in Physio ;' and that their Virtues are as great  
as those of any other Class of-'Medicines whatever, since they  
are suited to all Constitutions, easily incorporated with all other  
Remedies, and exquisitely calculated for'suhduing and removing  
almost all Diseases.. *Balfamics* have this peculiar to themselves,  
beyond other Medicines, that they are friendly to the human  
Constitution, and conspire, as it were, and contract an Affinity,  
with it. Of this we may easily, he convinced, by observing,  
hew speedily’Strength, impair'd'by chronical Disorders, old  
Age, or any other Accident, is restor'd by the timely and sea-  
sonable Usesof *Balsamics.* For this Reason no Medicines are so  
effectual in.Paintings, from whatever Cause, as *Balfamics*; and,  
in a Word, they wonderfully recruit, restore, and preserve  
that which is the original Source of Life, and imparts Strength,  
Pulsation, and Tone, to the Hearts Arteries, and Nerves, whe-  
ther we call it Principle, Spirit, Soul, or Nature; for they  
feem to he transform'd into the Nature'and Genius of that  
noble and wonderful Substance, which is the Director and  
Source os Motion to all our Members ; for, in a Syncope, **they**so suddenly restore Motion to the oppress'd Heart, purely by  
their Smell, that we cannot enough admire their Efficacy ; for  
fuch is the Nature of all Substances which abound with a pene-  
trating and fragrant Oil, that, when used either internally or

externally, they singularly cherish and preserve the Strength of  
our Constitutions. On the contrary, every thing that is putrid,  
fetid, and the Reverse of fragrant, is Highly prejudicial to  
Strength, and the Vital Motions, which it soon oppresses and  
destroys;. for every Degree of Putrefaction is highly prejudicial  
to Lise, and when it either begins, -or is increased, in a human  
Body, the Strength and Vital Motions forthwith sail, and are  
destroy'd, as we eVidentiy see in Plagues, malignant Fevers, and  
Mortifications of the internal Parts. For this Reason, Reme-  
dies prepar'd of *Bals.arnics Axes* justly styled *she Balsams,* **the**Waters, and the Spirits of Life, since they have such a direct  
and immediate Influence upon it. \* ."

, Since then *Balsamics* convey Motion, Strength, and Tone,  
th all the Parts of the Body, we may easily see, that these Me-  
dicines must he singularly efficacious in those Disorders, and  
Indispositions, where the Strength find Vital Motions are im-  
pain'd, or where the Viscera and other Pasts are too much

’elaxid'and deprived of their ilue” imd proper Tone, . For this  
Reason,' they will never frustrate the Expectation of the Pnt si-  
tian, who prudently eththitsthem. inTVeaknches of the Brain  
and'NerVes,yInthecillity. os the Memory find Senses, a Palsy of  
the Memhers,- a?Privation of Voice ,in Heiniplexy,Tnappeten-  
cies. Loathings of the Food, Vomitings, Diarrhoeas, and  
Gripings os the Belly ; in Cases where Flatulencies prove un-  
easy, in Languors of rhe whose Bedy, in Paintings, and in all  
cold catarthous Defiuxions ; in Coughs :that' are too moist, a  
Coryza, a Fluor Albus, a Gonorrhoea,, al moist Asthnth ; and,  
in-a Word,pin all Cases where cheParts ste m he strengthen’d.  
Then again, as’ the .best and most valuable *Balsamics* convey  
Strength and Energy;to the solid Parts of our Bodies, especially  
tothe Heart and muscular Fibres/ which move-and impelorfe '  
Fluids; hence it follows, that they are the so rest- find "most  
efficacious Preservatives, against all' Kinds os Diseases, as will  
sufficiently.appear.from the fallowing Considerations.- .dur long  
as/the Blood and-.Humours are quickly-and uninterruptedly  
earned thro' the Ducts and Vessels of the whole Body,.and  
what is.superfluous aiiffreiSethentitiotis carried off thro’proper  
Strainers and Emunctories, so long the whole Body,; and each  
particularPari of it,‘arein a State ofHealth, and dulyspersormt  
these respective Functions:' But as soon as this Monon is. either  
disturb'd or’ interrupted, In the whole Body, or any,ofiitsParts 7  
or when the necessary Secretions'' ate not duly ifiade,' a sure  
Foundation is, by these Very Means,.laid.forDiseafesTTNow-  
nothing is of more Efficacy for preserving the Vital Circulation.'  
of the Humours, and' carrying oii the necessary Business os  
Perspiration, than those Substances which strengthen and corro-  
borate the Heart, that principal Part fas the Body,I with.thesq  
*balsamic* QuahtIes; But our noble *Balsamics* are \ particularly  
and singularly useful, as Preservatives-'against putrid Diseases,  
and such as are justly formidable, sin account of their’ oohta-r  
giouS and malignant -Natures: \* For-Ilus Reason Ihey lareTused,:  
as Preservatives, with tmcoinrnon" Success, ' when. epidemical  
Disorders rage. They are also Vesp properly Join'd with Arexi-i  
pharmics in the aboVe-mention'd Disorders, hecause they resist  
Putrefaction, recruit the Strength, and promote a ohe Circula-  
tion of the .Humours: And finde'They To powerfully guardjagainst Putrefaction, which is so prejudicial to Liss, they, are,  
sor this Reason, Very properly and successfully used in the Vene-  
real Disease, which' is'tndy os arputrid Kind; and in those;  
Scurvies'which'ate the Result of 'an impure Air? ' find ’nnwhol-  
some Aliments; for' the Decoctions, .Elixirs, and Essences os’  
the Woods, derive their Virtues and Efficacy from the *balsamic*Qualities of the Ingredients : Besides, *Bals.amice,* especially of

. the fragrant Kind, have this fingular Advantage attending them,  
that they becalm the exorbitant Motions of our Fluids, -find  
allay Pain. For this Reason, im Violent Head-achs,: Tooth- v  
aohs, and Pains of the Ears, they often afford great Relief,  
eVen when only externally apply'd. Neither is it to he forgotten,  
that *Balfamics* prove excellent Correctors to all. the more Vio-  
lent and drastic Medicines, especialsy EVacnants and Anodynes;  
for they remarkably qualify their Virtues by their corroborating  
Qualities. . For. .this Reason, *Balsamics* are Very happily join’d

- with almost all evacuant and anodyne Medicines. From all  
these Considerations it appears, how proper and efficacious *Bal.,  
famics* are, for the Cure of a large Number *of* .Diseases..

But as nothing is, in every respect, perfect and complete; as  
there is no Medicine, however valuable in itself, but what pro-  
duces bad Consequences, when imprudently exhibited, there  
is no doubt to be made, but this is also the Case with *Balfa-  
niics* ; for when shere.is in the Body too large a Quantity of hot  
and fervid Blood, when its Motion is too much accelerated,.an(L  
the Pulse quick and vehement. Nature.has, in these Cases,  
more need of a Check than a Stimulus ; for which Reason we  
roust neither attempt to excite nor augment .the Motions of  
the Fluids. Besides, fragrant Substances have this Disadvan- .  
tage attending them, that when the Brain, in consequence of  
some Weakness, with Difficulty transmits the Blood, and the.  
Veffeis os the Heed are become turgid with Humours, they  
occasion a greater Derivation of Humours to it; and sometimes  
increase the Pains, Torpors, Vertigoes, and Oppressions of the  
Senses. I must here add, that Physicians have not as yet suffi-  
ciently discover'd the.Virtues and Efficacy of *Balfamics* in the  
Practice of Medicine; fince. they are sar more powerful and  
efficacious than is commonly helieved. The spirituous *Balsams,*which are commonly sold, and winch ought to hernade of the  
purest ethereal aromatic and cephalic Oiis, are, for the most  
part, sophisticated and adulterated; so that Physicians heve no .  
Reason to he surprised, if they, do not produce the Effects they  
would do, if they were pure mid: genuine. I must, in the. last  
place, observe, that Physicians are very saulty in drowning, as  
it .were, *Balfamics* in spirituous Liquors; since they almost  
always either mix them with Spirit of.Wine, or join them  
with it by Distillation; by which means the Virtues *of* the *Bal-  
samic* are infringed, and it assumes a violentiy.hotNature. The  
more, .then, their genuine Natures are retain'd, the more effi-  
cacious and useful they are. *Hoffman.*

Besides the.Balsams already mention'd, some others, winch  
are very scarce, and randy tohe met with, are mention'd by  
Writers on *tiae Materia Mediiasi* Amongstshese, is the

**BALSAMUM** .IPECUEBAEjoWbiCh is drawn’ froth the *Becutha  
-Nux* ; and, in *Brasil,* is'mnch esteem'd inssherdtharieandpara^  
lytic Cases, *' eteofsiroifer.* :T"’ I sista'

**- The** *Index Medicamentoruin.* **'also takes Notice of a** *Balsum***call’d BALSAMUM THOMrAEUM ; and of another Call'd BALr  
oAMUM VIRIDE, or OLEUM MARIA. ' .**

: There has, of late, heed imported froth *New England*an Gx-  
Cedent liquid *Balsam,* which, by its Fragrance, and whole Apr  
pearance/ should not he inferior' to rtiany’Iof’ those abowe  
described. I don't know, that it has yef obtain'd any particular  
Name. This has been frequently fold to the Apothecaries for  
the true *Opobalsamum."* :. 'S

**:i. .. 4... .** *. iA Mincral BALSAM* **in ALSATIAN . .** *ffi-s*

st In The Valley call’d *Libertbal,* near *Geesuacfisulsus:* antierit  
Mine-work *ffi.Als.atia)* there runs out of a Cavern a foul; pim  
guous, oily Liquor,; winch affords anexcellenfAa.fe«,by inking  
aQuantitysq6.it, and putting it in an Earthen Pot well Inted;  
that no Steam may exhale; and then within gentle Fine as first,.  
but a stronger afterwards, boiling it for Three Hours together ;  
in which . Space it will boil in a fourth Part, and an Earthen  
Mather, like Pitch, will settle itself at theTBottoth ; but on the  
Top thereof, when cold, 'there will swim alpinguouaSubstance,'  
like Li use cd-oil, limpid and somewhat yellowish, winch is th.  
lie decanted, from the thick Sediment, and‘then gently distill’d’  
in an Alembic in RSandrheatIT by which means there will opine  
over two differing Liquors, one phlegmatic, the other oily,  
which latter, swimming on the Phlegm,, is to he fever'd from it.'  
The Phlegm is used as an excellent Resister arid Curer of all  
the Putrefactions of the Lungs and Liver; and it heals all soul  
Wounds- and Ulcers. The oily Part, beingfiiluted with double  
its Quantity of distill'd Vinegar, and brought three times oyer  
the Helth, yields a rare *Balsam* against all inward and outward  
Corruptions, stinking Ulcers, hereditary Scurfs .and Scab;. 'Tis  
also much used against Apoplexies, Palsies, Consumptions, Gid--  
dinefies, and Head-achs. Inwardly they fake It, with Succory-,  
water, against all Corruptions of the Lungs. Tt'.isa kind of.  
*Petroleum,* and contains no other mineral Juices but that of Sul-'  
ph in, which seems to be thus distill'd byNature finder Ground *f*the Distillation of an Oil out of Sulphur, by Art, not heing im  
assy tospersorim *Philosophical Transactions. .......*

/‘i.-. *A Mineral* **BALSAM** shPTALY, 'si'. . E  
f. In .the. Territory of *Pergamo, Sig. Me.Ant. Castagna,* upon  
the Confines of his Jimsoictiim, lighted accidentally upon a not  
ordinary *swctt balsamic* Scent; I winch directed him to a rocky.  
HillL where he found the Stones harbour'd that Fragrancy,  
which was so strong, and, by Trials, sound so friendly to the  
IItirus, that, heing applied, they did, in a Very short times,  
cure it-of any Evil 'tis subject to. Encouraged hereby, he  
made his Workmen dig into the very Bowels of the Hill, where  
he discover'd Holes in some Stones, as if excavated by Art, of  
a greenish Colour, in which he sound, aS distill'd by Nature,  
and kept in Vesseis, that Liquor and *Balsum* which proved the  
Source of that Scent, winch was limpid, and of a white Colour, \_  
like the White of an Egg, but somewhat oleaginous, floating  
upon all forts of Liquors like Oil Besides, he met in the  
same Cavities some small1 Grains concreted of .the same Liquor,  
resembling that which they call white Amber, which, being  
chymically distill'd, had the same Odour with the *Balsum.  
Phil. Trans. ......*

**BALSAMUM DE CHILI.**

I have more than once, in this Work, mention'd the *Basu  
fam* of *Chili,* particularly in Quotations from *Mufgraue* and  
*Hoffman.* The Importance of these Authors renders it neces-  
sary. to inquire what this *Balsum* is, or rather whether there is  
any shch thing. Upon the best Information I can get, then, it  
appears, that there is ho such thing, known either in *England*or Spain.; from whence we may reasonably conclude, that all  
the other Parts of *Europe* are Strangers to it. The only Author-  
I have met with, who affirms its Existence, is *Salmon,* who, in  
his *Polygraphice,* recommends it as a sort of universal Pana-  
cea. .

.There is, says he, lately brought from *Chili,* a Province in  
*America,* a most excellent natural *Balsum,* differing (but not .  
much) from thofe of *Peru* and Tola, but no ways inferior in  
Virtues and Excellency, as the several Experiments lately made  
of it, by several learned Physicians, in the outing Of Diseases,  
have given evident Demonstration.

It is a Remedy that no Man under the Sun can compose,  
being a natural *Balsum,* distilling from a.Tree in *Chili,* bearing  
a Leaf something differing from an OliVe-leaf It is, without  
doubt, the most precious of all natural *Balsams,* by reason of  
its great Virtues, and admirable Odour, excelling all others,  
«ven the most fragrant.

The Merchant that has brought it Over, has only entrusted it .  
io be fold with Mr. *Thomas Passenger,* at the *Three Bibles* on  
*Londtm-oridge,* where it may always he had in any Quantity,  
ready put up in Glasses, seal'd with the *Balsum-tree,* Price  
twenty-sour Shillings the Pound, or eighteen Pence the  
Ounce. *Salmon.* .4 ....:.

Upon the strictest Inquiry, I have the strongest Reasons to  
helieVe all this to her .utterly false; for l am well inform'd, thay  
this *Balsum* is factitious, and. that it was made in the Person's  
House who sold it, her his Cook-maid..- *Salmon* therefore was  
deceived; or else, sor particular Reasons relative to his own  
Interest, imposed this Falshood on the World; a thing nor un..  
usual in these Days, wherein the noble Art of Medicine is pro-  
stituted to the meanest Ends.

k When redesign .to extract a large Quantity *os Balsum* of  
any. Kind, we, for that Purpose, make Choice os .the small  
Branches os inch Trees as yield it, when they are most fill'd  
?lth Sap ; for at that .time they yield more than at others.

hen we soak and boil them in Water, to occasion a Separation  
of the most fluid os the resinous Parts, which wegather off .the  
Surface of she Water. This is the Method of preparing some  
liquid *Balsams:* And this same Course might also he taken for.  
extracting the Resin from our Firs arid Pines, if Incision was  
not sufficient for that Purpose. *Geojfray, Mern. A.jspiA.*

**-- - BALSAMUM ALBUM. /"Ess" '**

.. What theChymists call by this Name is equal Parts of Vine-  
gar of Lead,..evaporated.Io the Consistence of Honey, and of  
Ciifof Roses. This.is in some Reputation,, amongst' the Sur-  
geons, asaDrier,:.

**BALSAMUM ANODYNUM BAT AEI : Bates's** *Anodyne Balsum.*

. Take os *Castile SDiQ,* an Ounce; of Opium, half an Ounce;  
os Camphire, six Drams; of Saffron, a Dram; and'of  
.. . rectified Spirit of Wine, eighteen Ounces: Digest them

together for renDays; then strain Off the *Balsum. \_. '*

. This is much like a PreseriptionOf *Hirsutus,* which he gives  
by the Name of *Balfamum Antipodagricum.* It is a most excel-  
sent Medicine, not only for procuring Ease in the most racking  
Extremities of Pains, but for assisting likewise in the Discharge  
of such Humours as Occasion those Pains. In nervous Colics it  
is os great Service; and it cleanses all the Viscera, and glandu-  
lar Parts. It is good even in the Jaundice, and fuch Distem-  
pers of the Urinary Passages as proceed from Obstruction of  
Gravel, or finny Humours. But its greatest Excellence is in  
allaying the Tortures of the Gout, promoting the Transpira- .

. tion os the peccant irritating Matter, and carryingoff the Fit,  
insomuch that, with a few proper Helps, this Distemper is  
hardly so obstinate in any Person whatsoever, but he may meet  
with great Relies, ifnot a thorough Riddance from it. Inward-  
ly it may he given from twenty Drops to fifty at a Dose; and  
heing outwardly applied to the pain'd Part, it does mighty Ser-  
vice, a Rag heing dipp'd in it, and laid thereon. *dlsuincJu  
Dispensatory. . ’*

*- Batemarrs Pectoral Drops* are imitated from this. I take  
the' only Difference to he, that *Patemards Drops* have a less  
Proportion of-the Spirit, and consequentiy, heing not so strong,  
may he given in larger Doses ; and that they have an Addition  
made to them of Aniseeds. - -

**.BALSAMUM ANODYNUM, vULGO GUIDONIS:** *Anodyne  
Balsum,* commonly call'd *Guidsis Balsum.*

Take ofHepatic Aloes, Gum Ammoniac, Bdellium, Caran-  
ma. Castor, Galbanum,\* Labdanum, Myrrh, *Balsum* of  
*Peru,* Olibanum, Amber, Tacamahac, and solid Storax,  
each half an Ounce: Reduce the Ingredients, capable of  
it, to Powder; then add-the full Weight of them all of  
*Venice* Turpentine: Put the Whole into a Retort, whereof  
they may fill but two Thirds, and distil it according to the  
Rules of Art; observing dexteroufly to separate the red  
Oil, or *Balsum,* from the Liquor that stoats above it.

If **the** Distillation he perform’d in an Alembic, with the Ad-  
dition of four times the whole Quantity of Spring-water, the  
*Balsum* will- he obtain'd free from any empyreumatical Impres-  
sion. *Edinburgh Difpenfatory.*

**BALSAMUM SIvE SPIRITUS EMBRYONUM.**

**Take** three Capons without **the** Fat, heat and Cut them  
small; add of Dates, one Pound; Raisins of the Sun, one  
Pound and an half; Baum, four Handlists; Angelins,  
Marjoram, and Chervil, each three Handfuls; Basil-  
**feeds,** half an Ounce; Fennel, Angelica, and Lemon-  
peel, each three Ounces; Citron-peel, Piony-root, and  
BorTage, each four Ounces ; Angelica, one Ounce and  
an half; Saffron, five Drams; Conserve of the Flowers  
ofBorrage, Clovergilly-flowers, and Marjoram, each four  
Ounces; *Spanijh* Wine, thirty-two Pounds: Distil to  
Dryness. With this Water, together with one Pound of

the Spirit of Clary, Black-cherry and, Baum-water, cacti  
th.ee Pounds: tiorragerwater, four Pounds; blanch’d  
Almonds, one Pound and a half, make an Emulsion : To  
. which add, of the Conserve ofPiony-sicwere, six Ounces;

os Borrage, and Clcvc-gilly-fiowers, each four- Ounces ;  
. Flowers of V rolets, Cowslips, *Angle Clovc-gilluristavjers ;*

red Rose-Sowers. and Marygold-flowers, each four Hand-  
. sills 5 Aloehywood, three Drams ; yellow Saunders, two

Drams and an lialf; Cmnamon, eight Ounces; Aromart-  
hem.Rosotvins one Ounce; Distil according to Art.

This Medicine is given with great Successto Women who  
have suffer’d frequent Abortions ; as also to Women big with  
Child, when they languish in consequence of a fudden Fright,  
or horn any external Cause, in there it also cures.Lipcthymies,  
Faintiogs, and inflations of the Belly; strengthens the Foetus,  
when weakly ; corroborates the Ligaments of the Uterus ; pre-  
vents the Epilepsy ., and assists Sanguification. The Dofe two,  
three, or more Spoonfuls, as the Circumstances of ike Case  
requires. *Pharmacopoea Bateana. . ' . :*

*BALsAwUM GENEVIEVJE, or* Genevieve’s. *internal and  
external Balsam.*

Take three Pounds of Oil of Olives ; of Rose-water, one  
Gallon ; of new Wax, half a Pound; of. *Venice* Turpen-  
tine, one Pound ; and of the Powder of red haunders, two  
Ounces. Boil the tv hole in a new Earthen .Vessel, wish  
three Gallons of red Wine. After it has hell’d for half ah  
Hout take the Vessel off the Eire,, and allow it to cool;  
then separate the Balsam from the Wine, and the Powders  
which remain at the Bottom of the Vestel. : -

This Balsam is used for Wounds of all Rinds, whether they  
perieUatc into the Cavities of the Body or not*., for* gangrenous  
Ulcers, Rheumatisins; all Pains, even those which are inter-  
nal ; such as the Pleurisy, the Colic, and Head-acts The  
Padent is to anoint the Part affected with some of it warmed,  
and take two Drams of it internally. It is also used against all  
Kinds of malignant Fevers, and the Bites of poisonous Ani-  
inals. - .' a.

When Wounds happen to penetrate into the Cavities of the  
Body, some of this Ointment must he fyringed into them ; and  
some os it must be exhibited internally in Veal, Capon, or any  
Other Broth ; or even in vulnerary Waters or Ptisans.

Bur what effectually proves the Efficacy of this Balfam, and  
what, probably, first procured it that uncommon Esteem- in  
which it is now universally held, is a Cure related hy MI.  
*Duvernes* the younger, in the Memoirs of .the Royal Acedemy  
of Sciences in *Paris* for I702- which, on account of the un-  
common Circumstances attending it, we shall here insert.

.. On *St. Thomas’s Eve,* in the Year I7OI. a Man of forty  
9r forty-two Years of Age, and of a good Constitution, hep-  
pened to receive a Wound with a Sword in the inferior and  
internal Part of the Middle of bis Right Arm. The Wound

, ran obliquely upwards into the Muscles for about four or five  
Fingers Breadth. The Blood flowed from the Orifice with un-  
common Impetuosity, which soon brought the Patient-to a very  
weak and feeble State. In this Condition be was carried to the  
first Surgeon that could possibly be found; the Artery, in the  
mean time, being secured with a Compress, and pretty sight Li-  
jature, apply’d above his Elbow, hut the Patient, recovering  
his Strength a hide, was conveyed to bis own House, where the  
Orifice of the Wound bring opened. Lint drenched in astrin-  
gent Liquors was conveyed to its very Bottom's then the Ori-  
fice was carefully covered up, and the Dressings, secured by  
proper Bandage. The Patient had some Blood taken from  
him, and was -reduced to weak Broths and Ptisan. The Wound  
was not dressed till forty-eight Hours after, when all the Dres-  
sings were removed to the very pledget, with a View to moisten  
them, and the Bandages, whicti were again applied with the  
same Care they had been in the first Dressing, This Method  
was, almost without any Variation, persisted in till the Eve of  
*Saint Genevieve*at which time the Blond flowed in great  
Plenty from the Wound. -For this Reason, a small Incision  
was made afresh, and the Wound dressed almost in the same  
manner as at first, though at the fame rime the Patient per-  
ceived, that the fore Parr of his Arm had changed its Colour,  
bur yet without any concomitant Pain ; his Fever was of the  
continued and burning Kind ; and bis Inquietude And Want  
os Rest, very great. At last,- on *Saint Genevieves* Day, we  
sound that not only the sore Part , of the Arm was gangrened,  
but thet the Putrefaction had spread itself to the internal Part  
of his Arm. The Patient, and those who were present, being  
struck with Terror at this -Discovery, demanded a Consulta-  
tion; and for thet Purpose made Choice of three Surgeons,  
much accustomed to inspeol Cases of a dangerous Nature.  
Upon examining the Patient, and taking a careful View of bis  
Disorder, they sound not only the fore Part of the Arm entire-  
ly cadaverous, but also its internal Part in the fame Condition  
as far as the Arm-pit The Bone, in the mean nine, was laid

bare by the Putrefaction for about three of sour Fingers Breadth  
from the Arm-pit. The Progress of the Mortification, the  
Fever accompanied with Oppression, the livid Colour of the  
PationrS Complexinn, his fmall and tremulous Pulse, were Cir-  
cumstances, which determined us to wait till we should see in  
which manner Nature herself would,operate ., and, in the mean  
time, to use both internally and externally such Medicines :as  
could cither support his Strength, or procure his Eafe.

; The fame Day, however, a Woman of the Name'of *Gene-  
vieve* presented herself, and offered to cure the Patient ; upon  
which, the two Surgeons, who were treating him, committed  
hain to her Care. Accordingly, *Genevieve* began her Cure by  
rubbing the whole Arm, and particularly the fore.Arm,,whether  
cadaverous or not, with the above-mentioned *Balsam.* Then  
she wrapt the Whole up in Cloths, which the secured with Pins  
fill Night, when she dressed the Patient again in the fame,  
manner. In the mean time she ordered him nourishing Fond,  
and rich Wine. Twenty-four Hours after these Measures were  
taken, a Suppuration began to appear. *Genevieve,* in the mean  
time, continued to dress the Patient in the fame manner; the  
wound assumed a more , and more , beautiful Appearance after  
each Dressing, and the mortified Flesh separated easily, and ad-  
hered to the Cloths, or,soft coarfe Paper, which she often used  
for Dressings. It was proposed to *Genevieve* to have the mor-  
tified Part of the fore Ann separated at the Joint, hot only be-  
cause of its strong and disagreeable Smell, but .because it was  
already almost separated by the Mortification; but she refused  
to comply with the Proposal, and skid, It was not necessary to  
take any Measures at all with regard to it, since her Remedy  
would sufficiently answer all the Intentions they could possibly  
propose by such a Step. *l. .... . ...*

At last all the fore Part of the Arm was entirely separated at  
the Joint from the Arm itself, six Weeks aster *Genevieve* under-  
took the *Cure,,* after which, she continued: to apply herOint-  
merrt to the uncovered Bone, and all the rest ofthe Arm,  
without having any manner of regard to the Filth whicti came  
from between the Bone and the Flesh, or to any other Cir-  
cumstance whatever. The Consequences however of her Con-  
ducti were sufficiently happy; for about a Month after the Se-  
paration of the fore Part *of* the Arm, the Part of the Bane  
which had by that means been laid bare, exfoliated, and.was  
entirely separated from the Remainder of the found Bone. Before  
this Separation happened, we were at a Loss to conjectiire what  
would -he the Fate of this large Portion of Bone, and of the  
Shreds of Flesh and Skin remaining .on the back Part Of the  
Arm; we alfo dreaded an Haemorrhage. However, none of  
these Suspicions disconcerted *Genevieve* in her Measures.; she  
continued her ordinary Dressings, the Consequence os which  
was, thet the remaining Fibres poured forth a nourishing Juice,  
and lengthened themselves fo as to cover the Extremity of the  
Bone, and form a very natural and beautiful Stump.

All this was.traofaoled, and the Cure completed, in theSpace  
of sour Main tbs, without the Patient’s being so much as once  
attacked with a Fever,, or any other Disorder: He was twice ,  
purged during the Course of the Cure, and at prefenfenjoys a  
persecti State os Health. ... .. *:s A. l. -A ...mi..-*

. . . .REFLECTIONS, si’- su

We have Reason to. believe, that the Mortification was occa-  
-.. sioned by the manner of Dressing the Patient at .first ; for,  
hesides the too tight Ligature on the Wound itself,: there  
. was also a Compress strongly applied, all along the Artery as  
. sat as theArm-pit; fo that' the nutritive Juice was inter-  
cepted from the fore Arm, and the Tarts were compressed  
by the Bandage. This inconveniency may he shunned .by  
tying the wounded Vessel, when ’tis possible,:-his using the  
Bandage for the Aneurysm, which is a sort of Truss, or- by  
' applying to the Orifice of the.Vestel a Piece of a particular  
. Species,of Match used in *Germany,* and made- of Hemp, of  
that Species pf Mushroom called *Lyc'ppordan,* either boiled  
or not boiled ; but when the two last-mentioned Remedies  
are used we must take care to secure them till, they adhere

: to the wounded Vessel, and then dress with unripp’d Match,  
ύ or absorbent and balsamic Powders, -remembering .in heth -  
Cains to preserve the Circulation in the Part affectsd.

The great Haemorrhage, four liberal Venesections,: and a very  
strict Regimen, had not Duly exhausted, bur impoverished  
the Mass of the Patient’s Blood ; so-that being destitute of  
its unctuous and chylous Parts, it-could neither recruit itfelf,  
nor supply a proper Matter for invigorating: the wounded  
Tart. These Circumstances contributed, at once,: to bring  
on the Fever, and augment the.Mortificationj.Tsineethe In.-  
disposition remain’d unallay’d and. uncorrected by. proper  
Means. Accordingly, as soori ias the Patient began to live  
upon nourishing Aliments, his State of Health hecarne better,  
the Progress ist the Mortification .stopped, and the unmorti-  
fled State of the Parts -hegan(to:, discover itself by a Dis-  
. charge of Matter,:which separatedthetween the sound and  
mortified Parts, u We have Reason, to-sistposs, thatthe Ves-  
sels had been in .a manner.’ cauterized, and blocked up by

*Corrosive Juices, just as they* would have been by the Appli-  
- cation, of common Caustics, or Ligatures; since the Artery  
did not discharge its Contents in the time of the Suppuration,  
though no Applications were used to prevent it; though it  
was *so* near its Trunk, and though the Patient lived upon  
nourishing Aliments, and rich Wine. 'The agreeable and  
-insensible Manner in which the Suppuration, and consequent  
Separation of the mortified from the found Parts was carried  
on, afforded Time for the Artery to repair and fortify itself ;  
from which we may learn, that 'tis always improper to hasten  
the Separation of an Eschar, or too soon remove Ligatures  
from the Veffeis to which they heve been applied. On the  
' contrary, we ought to use such Medicines as are capable of  
absorbing the Humidity os the Parts, that thus the Ligature  
- or Escher may remain the longer, and by that means afford  
an Opportunity to the Flesh and Veffeis to sprout out, to  
. unite themselves, and make a joint Resistance to the Impulse

of the Bloed.

We are by this Case also taught, that most of the Measures  
- ordinarily taken to bring on the Exfoliation of Bones, either  
-inWhole or in Part, are often useless, if not hurtful; since  
. that is properly, the Work of Nature. The great Secret in  
. -this Case consists in preserving the natural Heat of the Part,  
and in augmenting it when it is too saint and languid; both  
- Os which are often done with little Trouble, and in a short

time, as appears by the foregoing Case, where both were  
easily effected notwithstanding the bad State Of the Arm, and  
the small Quantity of Flesh, that remained on it. On this  
Occasion, tor Instance, the Rugine, the Trepan, and -the  
Application of Caustics, had heen entirely useless; and eVen  
though the Bone had heen sawed off upon the Separation  
. of the mortified Flesh, the Patient would not have been  
- the sooner cured by that Step; on the contrary, the Exfoli-

ation would have heenrevidentiy retarded, and the Elonga-  
. tion and Sprouting out of the Fibres entirely prevented.  
**I** have seen some Surgeons wait in vain for the Exfoliation of  
- some Part of a Bone, for seven or eight Months, and even  
- for a whole Year, notwithstanding the Use of dry Lint,  
- -Spirits of Wine, Caustics, and the Rugine; whilst others,

who followed a different Course, happily produced the de-  
sired Effect in a much shorter Time.

**: BALSAMUM LtiCATELLI :** *Lucaiellus’s Balsam. '*

ρ Take of the best yellow Wax, one Pound ; melt it over a  
' moderate Heat, in a like Quantity of *Canary:* Then add

**Of** the best Oil of Olives, and *Fenice* Turpentine, wash'd  
**to** a Whiteness in Rose-water, each one Pound and a half.  
. Boil them by a gentle Fire, till the Wine is evaporated;

then removing it off, sift in of red Saunders in fine Pow-  
der, two Ounces; stirring the Whole about continually,  
till it is quite cold, that it may become a *Balfarn.*

This IS but a modem Prescription, so that the College had it  
not at first. It is used however Very much in the present  
Practice, both for internal and external Uses, *squincs.s lLon-  
don Dispensat. .si , , ,*

This was Very unsitilfully directed ; for the melting the Wax  
*in Canary* can answer ; no End, unless to such whose Opi-  
nions of ar Medicine are in proportion to the Trouble of  
making it.; nor does the Washing the Turpentine with Rose-  
water avail any thing. . If therefore the Materiais are all good  
in their Kind, as soon as the Wax and Turpentine are melted,  
let the Saunders he stirred in without any boiling at all. But  
eyen this .way, winch the Shops are obliged to comply with,  
hecause the Physician would not else know what he prescribes,  
the Saunders is a Very injudicious ingredient; for it cannot  
answer any End as a *Balsamic,* neither in internal nor external  
**Use ;** and if it be put in for the Colour-sake only, this might  
much better be done by boiling Dragon’s-bloed for some time in  
the Oil, with a sufficient Quantity of Water to keep it from  
burning; for with that it. might be brought up to any Degree  
of Colour, and to a much more elegant Red than the Saunders  
will give. .And when the Oil is tinged, strain it off, min the  
Wax and Turpentine with it, and all is finished ; and this way  
it is made in some of our Hospitals. By this means the Medi- .  
cine is not clogged with Dust to give it a Colour, and is there-  
fore much better for all the Purposes it seems originally design-  
ed sort This Composition stands recommended for an internal  
Vulnerary., and is prescribed in such Coughs as giVe Suspicion  
of Tubercles and Ulcerations in the Dungs; and also in all  
internal Decays from the like Couscs, whether the Seat he in  
the Breast, or any other Pars, It is given likewise upon acci-  
dental Bruises, and inward Bleeding. Externally it is used to  
.deterge and incarnate green Wounds and Ulcers, that are not  
of. too long Standing; but in the latter Intentions, the Saun-  
tiers is a Vast Prejudice to It, and helps ro foul a Wound more  
than to cleanse and heal it. Inwardly it is given from one  
Dram to two Drams at a time, either mined with a lirtie Sugar,  
or pleasant Conserve, *Quines.s Difpensott. . .*

*The* **Edinbtmch** *Dispensatory gives this Preparation disserent from  
that of the Colleges so*

Take of the best Oil of Olives, a Pint and an half; of *Co-,  
nary* Wine, a Pint ; of Dragon’s-blood reduced to Pow-  
der, an Ounce; hefl them together oyer a gentle Fire, till  
**the** Wine is consumed; then add of yellow Wax,, **a**Pound ; of *Fenice* Turpentine, a Pound and an half; and  
of Balsam of *Peru, vhq* Ounces: Mix them together,  
hy boiling them a little ; but add not the Balsam os *Peru*before the Vessel is removed from the Fire.

The substituting Dragon’s-blood sor red Saunders alters this  
Medicine considerably for the better, aS it improves its Colour,  
and adds to its *balsamic* Virtues; both which Ends are very in-  
differently answered by the Saunders. But if the Colour were  
to he primarily regarded, nothing gives a more beautiful Red  
to Oil that Alkanet-roots, insisted warm therein.

**BALSAMUM POLYCHRESTUM :** *A Balsam of many Virtues.*

Take two Pints and an half of Spirit of Wine, infuse in it  
with a gentie Heat, and after stirring it, twelve Ounces  
Of Gum Guaicum; and lastly, add one Spoonful of *Peru.,  
vian Balsam, so* that the Whole may mix together into  
a Balsam.

X ν

This is but a Very modern Prescription, and lately receiv'd by  
the College ; but here it differs from their former Edition, in  
rejecting the Sarsaparilla, and increafing the Gum Guaiacum ;  
which is certainly much to the Advantage of the Medicine,  
because its Virtue wholly consists in the two Ingredients here  
retained, the Sarsaparilla affording nothing to the main Inten-  
tion, which is greatiy to warm the Nerves, and refresh the  
Spirits.

This is an efficacious Remedy for many good Purposes ; but  
particularly to warm and defend the Nerves from those Defluxi-  
ons which prejudice their Motions ; and when they prove of a  
saline tartarous kind, make the Gout in the Joints. To pre-  
serve against this last-named Distemper, there is not a hetter  
Medicine, considering the ConveniencieS of making and taking '  
it. It will likewise answer all the Ends that are aimed at by  
the Wood Diet-drinkS; it dries up, or dissipates by insensible  
Transpiration, all superfluous Moistures, is good in all Vene-  
real and scrophulous Cafes, and very certainly wears off an old  
Gleet, where the Virulence has been previously removed. It  
.will change an aqueous Vehicle milky, but may convenientiy  
enough be given in any Liquor, and it is usually taken from  
ten to thirty Drops, two or three times a Day. It is some-  
what strange, that this Medicine is almost neglected in a regu-  
lar Practice, and yet made -a great deal of, botluaS to Profit  
and Reputation, -by empirics, with some of whom it has been  
pretended a Family Secret, aS the *Elixir Salutis,* that is, *Daffsis  
Elixir,* and some others, which are first stolen from some Phy-  
sical Writers. *Colmey’s Difpenfat. ’*

**BALSAMUM CONTRA RHEUMATISMUM: Os,** *Bals.ansu  
s''" against the Rheumatism.*

Take of Rosin, and *cABcergundy* Pitch, each balsa Pound;  
Shoe-makers Wax, two Ounces; yellow Wax, four  
Ounces; *Venice JourpratisuA,* two Ounces; new Hogs  
Lard without Salt, and fresh Butter, each a'Pound; Es-  
sence of Rosemary, three or four Spoonsuis: Mix, and

-sc make a Balsam according to Art.  
e— \_ " 'j.i \* .i..t ’ -'..

h This Balsam was ^communicated to Mr. *Dtrverney* **the**younger, as a great Secret, under-the Tide of *A Balsam flor  
Pheumatifms, Gunsshof Wounds, Ulcers with Caries,* and others.

Before ufingtt, the Wound, or Ulcer, must be washed with  
warm Wine; then the Balsam must be wanned in a Hate,  
and some of it must he poured-into the Wound or Ulceras hot  
as the Patient can bear it; then put coarse soft Paper over it,  
and wrap it up with a lined Cloth.. *Mernarre de SAcadertie,*I702.- si ffarss.ss- ...

**. BALSAMUM SAMARITANUM :** *The Samaritansalfam.*

Take equal Parts of Wine and Oil, and boil them till the  
' Wine is consumed. This takes its Name froth the good

*Samaritan* of the Scriptures, and is esteemed for cleaning  
and healing Wounds. ' ‘

**BALSAMUM SULPHURIS ANISATUMr'** *Balsam of Sulphur  
... - with Oil of Aniseed.*

This is prepared in the same manner, with Oil of Aniseed, as  
the Balsamum Sulphuris Terebinthinarum \_ is with Ost of  
Turpentine.

**BALSAMUM SuLPHURIs CRAssUM: ‘** *Thick Palsum of  
 - ’ Sulphur. -*

, Take of linseed Oil, or Ost of OliVes, a Pound; Of  
Flowers of Sulphur, four Ounces; and hell them toge—  
.. ther over a soft Fire to the Consistence of a Balsam ; keep-  
ing the Matter Continually stirring.. *Edinburgh Disipen-  
sutory. . " : / . '*

**BALSAMUM TEREBINTHINAE :** *Bals.am of Turpentine.*

Take of the best Refin, and Sand; each equal Quantities ;  
mix them together, so that they may he distilled in a flow  
Sand-heat; first the Phlegm, then the Oil, and lastly, .

. .. upon raifing the Fire, and changing the Receiver, the Bed-  
sam will come over. , .....

The Sand is of no other Effect than to divide the Resm, and  
facilitate its Rising in the Retort, *Qsiincsts London Dispensa-  
tory-. .*

**' : BALSAMUM. VIRIDE :** *The Green Pals.am.*

Take of Linseed Oil, half a Pint; of Gum Elemi, two  
Ounces; of Verdegrise in Powder, two Drams; mix and  
boil them together over a gentie Heat, so as to make them  
into an Ointment, *S. Ac ' - -*

This is a Very modern Contrivance, and is much used by our.  
Surgeons in some particular Dressings, *squincsis London Disc  
pensutory. " .sc ...*

The *Edinburgh* Dispensatory directs this somewhat different,  
aS follows: . ' -

Take of Linseed Oil, and Oil of Turpentine, each a Pound ;  
Of Verdegrise reduced to Powder, three Drams ; and bod  
them together, keeping the Mixture stirring, so as to  
dissolve the Verdegrise.

**BALSAMUM ViRiDE DETERsIyUM :** *The Green detersive*‘ i *Balsam. '* 6 '

Take os Linseed Oil, and Oil of Turpentine, each one  
Pound ; of Gum Elemi, Oil of Bays, and the best Tur-  
... pentine, each four Ounces ; Powder of. Verdegrise, one  
Ounce; mix and these all together over a gentie Heat,  
Continually stirring all the while, so as to make them into

Y. a Balsam, *S. A. ’ . "so*

This.is said to he greatly Valued^ in . the present Practice,  
amongst our Surgeons as a Detergent; I *Gluincfoe London Disc,*

**. BALSAMUM VIRIDE METLNsIUM: SEU DoMINas  
../Ἄ -FoEUiLLET; Ἀ ψ ' ‘**

\* ‘ 'si " ' . . -- . I . . -ρ ’ - . ». ἰ

- Take of the expressed Oiis of Linseed; and Olives of each  
. : ene Pound ; Oil of Bays, one Ounce; of *Venice* Turpen-

' tine, two Ounces; melt them upon a Very gentie Fine;  
and when they are cold, mix with them distill’d Off  
of Juniper-herries, half an Ounce; -Verdegrise, three  
Drams; Succotrine Aloes, two Drams; white Vitriol; a  
Dram and an half; Oil of Cloves, One Dram ; make a  
Balsam, *S. A. :* n.’rssim T

.... ....... ' - REMARKS. . . . SE

- - ' ὸ - ....... JT . .... -j". T \*- ; - -

The Vitriol, the Aloes, and Verdegrise, must be powder'd *sepa-*rately very fine; and the Turpentine, Oilos Olives, of Lin-  
seed, and Bays, must be mix’d together over a gentle Fire  
-when the Mixture is halfoold, incorporate exactly the Pow-  
ders, stirring the Matter some time with a Spatala ;, after,  
wards add the distilled Oiis of Juniper-berries and Cloves,  
making them all into a Balsam, winch must he kept in a

Wessel well stopped. " - *- s.* τ ἐν ;: .

It is proper to -cleanse Wounds and Ulcers, toincarn and cica-  
trize them; for the Bites of Venomous Animals, they heat

\* it, and put it into Wounds with the Feather of a Quill, or  
a Pledget of Lint, and apply upon it the *Styptic Plaister as.*

*-- Croiliusr. - 'frill s'": - of*

This Balsam was first invented by Monsieur *Duclos,* a *Physi-  
cian at Metz!:* Madame *Faeuillet* used *it nt. Paris,* and had  
it called by her Name. *Larners, s Pkar. Universe*

**BALSAMUM VIRIDE VULNERARIUM 4** *The Green Vulnerary  
. Balsam.* v

„ Take of Linseed Oils one Pound and an half ; Turpentine,  
twelve Ounces ; of the Leaves ofAdderbrtongue, gathers,  
ed in the Month *os May,* six Handfuls j mix, and . infuse  
these warm together;. then, boil them tifl the Leaves are  
crisp. Press out the OilTand add to it of Gum Elemi,  
four Ounces; os Oil of Bays newly extracted, two  
Ounces; of the best Turpentine, one Ounce ; of the  
Flowers of Verdegrise, two Drams. Let them all melt  
Oyer a gentie Fine, continually stirring them about to faci-  
litate their Mixture; then strain again, and let the Whole  
cool into a Balsam, *sIspincsu London Disipensut. ’*

r .... - \* ' 5 \* i r I.

There are many Sorts of artificial Balsams of Sulphur, which  
have acquired great Reputation in Medicine; The Methods of  
preparing them are aS follows: - ' \_ -

**BALSAM of SULPHUR** *uJith expressed* **OILS;**

To a Quantity of airy expressed Vegetable Oil, contained in  
a glazed Vessel, set oyer the Fine, add a fourth Part of the  
Flowers of Sulphur, as soon as the Oil is sufficiently het  
*- to* dissolve the Sulphur, which will now fall ro the Bottom

Os the Oil, like a highly red shining'Liquor, and they  
will remain with this Degree of Heat, for a long time,  
tinmixed ; but the'Fire being gradually increased, though  
with Care, to prevent the Matter from taking PIame, at  
length, when the Oil begins to fume; it will intimately  
mix with the Sulphur, and the Whole become opake, and  
form a hew and- entire Body os the two. Is more Sulphur  
be added, tins aiso may be easily dissolved, by bringing the  
Oil to fume; and almost to boil ; and. thus, at length, -a  
’ Considerable Quantity of Sulphur may -he- dissolved in a  
small Proportion of Oil; so as perfectly *to* Jose its former

. Nature of Sulphur;‘δ᾽ - ’ ‘τ .s - -

*:so R*EMARK& - ‘-

This is the fainous Balsam of Sulphur os *He Ims nt, fisulandtis,*and *Boyle,* who Very highly commend it sor heating, molli-  
fying, and resolving, when nfed externally ; and internally  
against Putrefactions, and Suppurations of the Kidneys and  
Lungs especially, declaring they have thus sound a secret,  
but effectual Remedy for Consumptions osime Lungs; hut  
I judge, that by its acrimonious, indigestible, and hot unctu- '  
ous Part, jt offends the weak Lungs, the Stomach and Viscera,  
os languid Persons, spoils the Appetite, increases Thirst, and  
parches the Body,- already too much dried by the Distemper. ’  
And this I speak not rashly; but upon Experience and Consi-  
deration ; . and therefore advise it to he sparingly and cauti-  
oufly used, with a careful Observance of the effect: Cer-  
tainly it is not without a burning'Rancidness, as Being found,  
when externally used, successfully to cure pale; cold, watery,  
mucous, sanious, running Ulcers. Perhaps it was hence  
somewhat too hastily concluded to have the same Effects  
- when used internally ; sor thus it raises and continues a Fe-  
ver. The Chymical Use of the Experiment shews, that Sul-  
phur, which remains untouched in *Alcohol,* the most subtile  
of Oiis, expeditioufly, and almost-totally, dissolves in a Very  
thick and fluggish Oil, strongly heated by the Fire ; which  
’ evidentiy shews, with regard to the History of Menstruums,  
that an extreme Degree os Snbtilty and Penetrability does not  
here perform what may speedily be effected by a fluggish and  
Viscous Matter. But this is not all: Chymists often wonder  
that many Fossils, ’which remain untouched by the sharpest  
acid Liquors, should yet' be successfully resolved by a mild  
and indolent Oil. Sulphur does not yield to any acid Men-  
struums for-there is-no known Acid stronger than that  
already contained in the Sulphur, whence others cannot act  
upon it but Sulphur is dissolved by Oil: As often, there-  
. fore, as a’ seffil Glehe,'-when boiled in Oil, affords such a  
sulphureous Balsam, the Oil must act upon the sulphureous  
Part of the Mattes, unless we except Lead, whose metallic  
Part dissolves into a Balsam with Oil.

**BALSAM** *ns.* **SULPHUR wise TURPENTINE;**

Ἀ ’ *i . ae’.: e\* \* - \* .* \* '.1. i '\* ’ τ. i 5 ’ - ‘ ' i " . . ...

Put an. Ounce of the Flowers os Sulphur into a tall Bolt-  
head ; pour thereon six femes the Weight of the ethereal  
Oil os Turpentine; let them boil for an Hour ; the Sul-  
phur-will first melt at the Bottom, and part of it will he  
dissolved - in the Qil that floats above it; with a crackling  
Noise, fillat length the whole Sulphur will appear dissolved  
in the Oil. Let all cool, and a large Proportion 1 of the  
.Sulphur will appear concreted into yellow Spicnhe at the  
Bottom, the *Bals.am* remaining at the Top ;. so that the  
Sulphur seems precipitated by a true Crystallization in this  
*Balsam.* Pour off the clear Liquor entirely, from the  
golden sulphureous Crystals,- into a clean Vessel apart; add  
fresh Oil of Turpentine *to* the Remainder; boil aS before,  
and all The Sulphur-win be‘dissolved into a *Balsam* ; but  
when 'suffered- to cool,' it again shoots into sulphureous  
Crystals. Again, pour on more Oil, and continue thus,  
till all the Sulphur-is perfectly dissolved ; whereby it will  
appear, that one Part of Sulphur requires about sixteen of  
this Oil to dissolve it entirely. Keep all the *Balsams,* thus  
prepared, under the Title oTBalsam os Sulphur with Tur-  
pentine? ; This Operation requires the utmost Care, as be-  
ing attended with Danger; for if the Mouth of the Vessel  
was stopped, rhe boiling Matter would burst the Glass with  
greater-Violence than has been hitherto observed in any  
ί other Experiment. ...

**R E M A R K s.**

Hence we see, that a thin, penetrating, sharp, distil’d Oil,  
cannot easily dissolve the Sulphur, though a mild, gross, and  
indolent Oil so easily does it, as we saw in the preceding Pro-  
cess ; whence it should seem, that the more subtile the Oils  
are, the more unfit to disiolve Sulphur, as appears remarkably  
in *Alcohol. It appears also,* that Sulphur dissolves in distil'd  
Oiis, as Salt dissolves in Water, till the Water is saturated ;  
but afterwards is thrown off into Crystals. . The explosive  
Force of .this *Balsam* of Sulphur is the most violent os any  
that is known. Tins *Balfarn* consists os the Oil of Sulphur, the  
Oil of Turpentine, theperfect AcidosSulphur, like that made  
by the Bell, and a fixed Earth. This *Balfarn* is an extempo-  
raneous anodyne Remedy in .Pains of the Nerves, and an ex-  
cellent Medicine in sanious, sinuous, weeping, .watery, and  
-fistulous Ulcers. Internally taken, It is heating, diuretic;  
and sudorific. It is recommended for cleansing and healing  
internal Ulcers ; it is hence too highly commended inr a  
Consumption,. Ulcers of the Kidneys, and for expelling, and  
’ dissolving the Stone ; but the .cautious Physician will recom-  
mend only the gentle Medicines, and be afraid of those that  
operate Violently. It is certain, that the Urine is soon im-  
pregnated with a Violet Smell, upon taking a little of this  
*Balfarn ;* and hence also the Tinctures of Fossils, Extracted  
by Art, with distil'd Oils; are safely received sor theTin-  
.ctures of Metals. This is call’d the *tcrebinthinated Balsam*of Sulphur; and as other distil'd Oils may be thus mixed  
; with Sulphur, *the Balsams,* so prepared, receive their Names  
from the distil'd Oil employed, which gives them their pre-  
Vailing Odour. Hence the *Balsumum Sulphurio anifaturn,  
fuccinaium,* and *yuniperinum. ..........*

The Balsam os Sulphur with Turpentine is generally directed  
to be made with common Ost of Turpentine, and not with the  
aetherealOil, in the manner following:

Take Flowers Of Sulphur, sour Ounces; and Oisof Turpen-  
tine, one Pound : Place' the Mixture in a Sand-surnace;  
stop the Matrass loosely with another Glass ; apply a small  
Fire for one Hour ; then increase it till the Oil boils gent-  
ly, in which Degree keep it three or four Hours; then let  
it cool, and pour off the impregnated Oil from that winch  
is not dissolved. -

This is an excellent Medicine for all Diseases of the Breast,  
and likewise for Ulcerations and Obstructions of the Urinary  
Passages ; but 'tis nauseous to take at first, hecause os an Em-  
pyreurna, winch wears off with long keeping. -Its Dose is  
from six to fifteen or twenty Drops, upon fine powder'd Sugar,  
which is the best way to take it, because st will not well mix  
with any Liquor. After the same manner jo a Balsam made  
with any other Oiis, as Aniseeds, which is much used in. the  
same Dose, or any other the Physician may direct; but Care  
must always be taken, lest it boil over, because it immediately  
takes and burns so fiercely, as to endanger a House. The Ves-  
sel ought therefore to be large enough to he .two Thirds at least  
empty, to give it room to rise without running over. *Quines, s  
Dffpens.atory.* - C ......S

The following extraordinary Case, related by *Hoffman,* may  
ferve as a Caution to those who make Balsam of Sulphur with  
Turpentine.

Considering how universally Chymistry is cultivated, few I  
believe are ignorant os the surprising Effects produced by Gun-  
powder, and the *Puluis fulminans,* as it is call'd, which is  
made up of three Parts or Nitre, two Parts of the Salt of Tar-  
tar, and one Part of common Sulphur; and also by the *Aururn  
sulrtinans.* But it may possibly appear somewhat strange and  
uncommon, that a distil'd Oil,; especially Oil .of Turpentine,  
and in which common Sulphur has been dissolv'd, should, when  
shut up in a Glass, and exposed to a strong Fire, exert itself  
with a Degree of explosion, at least equal, in not superior, to  
that os Gunpowder. However, in Confirmation of the Truth  
os this, I shall here give an Account of a memorable Accident  
whichthappened on they th *of November* I698. at *Tsellers.eldt in  
Germany,* to the great Surprize and Astonishment of the Inha-  
bitants. . . \_ - ...... . . /. . Ϊ

A certain Apothecary putting some *Balsam* of Sulphur, with  
Oil os Turpentine, into a pretty strong Glass Retort, commit-  
ted it to a Sand-heat ; and the Mouth of the Receiver heing  
strongly shut up, he apply'd a Very briik and intense Pine. Soon  
aster such a Violent Noise was heard, as made the People who  
were in the House imagine, that a Hurricane had arisen of *so*boisterous and dangerous a Nature, as to threaten the imme-  
diate Ruin and Downsal os the House. A certain Apothecary's  
Apprentice standing by the Mortar in the Area not far from **the**Laboratory, was suddenly «sash'd against the Wall.; and . ano-  
ther, who was standing within the Gate of rhe Acea, being,  
as it were, thunderstruck, dropp'd down upon the Ground.  
But, upon his Recovery, he perceiv'd a very fetid arid strongly

sulphureous Smail 5. and suspecting from this Circumstance,  
that the Havoclc and Confusion produced was owing to an  
incautious and injudicious Management of Sulphur, he ran  
withiall the Haste he could, along with a Neighbour who  
came to discover the Cause of *so* uncommon a Noise, into  
the Laboratory, where they found one half of the Retort  
remaining in the Sand, and the other half, together with  
the Neck, forcibly driven a great Way into the Ares, through  
the Kitchen-windows, which it had broken and shatter'd Very  
terribly. .

. Nor were these the only Effects produced by this impetuous  
Explosion ; for it broke the Linor of a Collar, and forcibly  
drove it, and some Pots and Dishes, out of the Kitchen into the  
Area. It also broke another Door which communicated be-  
tween the above-mentioned Cellar and the Laboratory, and  
tore a Very strong Lock off it ;\* and as from the same Collar  
there was an Ascent by in winding Stair-case, built in a manner  
resembling a spiral Shell, to another Apartment, it also broke  
open the Door of that, and threw a Chest of Drawers, in  
which there were some *Dutch* Vessels for holding Confections,  
upon the Floor. In the same Apartment it also lifted some Vess  
seis os the same Rind from amidst others, and dash'd them on  
the Floor, and drove both the Windows into the Area. Besides,  
It shattered the Windows by the Door which opened to the  
Street ; and in a smaller Apartment It broke the Flooring, and  
threw down the -.Door, together with the Door-case, Lock,  
and Hinges ; the-Windows of this Apartment were also shat-  
ter'd. It also threw open the Door of the Apartment where  
the distil'd Waters were kept, and another Door which com-  
municated with the Laboratory, with great Force and V io-  
lence. . In the Laboratory itself it only broke , the Glasses os the  
Windows, and loosen’d their Cases, without carrying them  
along with it, . . γ. . . - « .

The People in the Neighbourhood assirm'd, shat *at the* Very  
Instant the Noise was heard, a large Quantity of thick Smoak  
ascended from the Chimney ; that the Noise was equal to that  
produced by. the Discharge os Cannons ; and that the explosive  
Force reach'd all the several Quarters of the Town, and shaked  
almost every House in the same manner an Earthquake used to  
do. ’ : ... ς" ; -

This surprising Accident, the incredible Effects -of-which I  
saw with my own Eyes, clearly discovers the Genius, Nature,  
and irresistible Force of Lightning and Thunder; and con-  
vinces us, thet their piercing and Violently cosicussive Force de-  
pends upon the strong Percussion of the Air, whilst it is impe-  
tuoufly agitated -and thrust from its Place by means os an igne-l  
ous, expansive, and highly elastic Principle; fo that a whole-  
Column *of Air os* a considerable Weight produces Various and  
wonderful Effects on Objects that are exposed to it, especially  
if they are of a herd and resisting Nature, by bruising, break-  
ing, and agitating them; for in reality the surprising explosive  
Force of Gunpowder, when kindled, is- not to he ascribed to  
Nitre or Sulphur, aS the material Cause, but rather to the Co-  
lumn of Air impetuoufly driven from its Place by the Violent  
rarefactive and expansive Motion os the Air: - Hence we see,  
that.Estects of the same Kind with those produced thy Thunder  
and Lightning may, without , the .Concurrence of Nitre, be  
produced by a sulphureous Substance close shut .up and in-  
flam'd. . ...

Nor is it to he doubted, but the tremulous and concussive  
Motions Of the Earth, commonly; called *Earthquakes,* 'fre-  
quently draw their Origins from fuch a sulphureous Substance  
heing resolved and. kindled in subterranean Caverns, where ltis  
sometimes found in great Plenty; sor 'tis most Certain, that no  
nitrous Salt, winch is produced only by the Air, Can he .ingen-  
der'd and form'd in the Boweis of the Earth.

Besides, this Experiment furnishes us withTome Very useful  
Cautions ; and in a particular, manner teaches us, that all in-  
flammable Substances, Oiis and Spirits not excepted,, especially  
when close shut upssn Vessels, ought to he managed cautiously,  
and with a due Degree of Fire,. lest by the .Violence.of their ex-  
plosive Force they should destroy. People, or. .. throw .down  
Houses; for wssknow, that a few Years ago some ChymistS  
*in Leipsic* **were** convinc'd of this, tocheif Loss, whilst:in distil-  
ling rectified Spirit of. Wine, in a Copper Still, by.the Appii-  
cation of too strong, a Fire, the Velseis were burst, and.the Spi-  
rit broke out in a Flame.

: For the Illustration of this Experiment we may aho bring a  
memorable Observation publish'd thy *Mauchardus* in the *Ger-  
man Ephemerides.* . A Cooper pur some Measures of.dephlegm-  
ated Spirit os Wine into a Cash, winch held thirteen Firkins,  
in Order to take away-the Taste of the hew Wood st, and, burn-  
ing Sulphur upon It, he ignorantlyishut np all the Holes of the  
Vestel ; upon which such herExplosion was made, that the Peo-  
ple of the Neighbourhood imagined ap Earthquake had hap-  
pen'd. By means os this Explolion the whole posterior End of  
the Cash, thoughthree Inches, thick, was not only brohen in  
two Parts, in, the transverse Direction of the Boards, but also  
driven to a Wall at the Distance os four Feet from it with such  
Violence, that its Fragments were bruised and dashed in Pieces,

chut its exterior End remained entire in the Groove; and at the  
same time the Bar which was designed to render it the firmer,  
was driven away with fuch Violence, that the Iron Nails which  
fixed it were driven as forcibly into forne Boards lying near it,  
as if a largo Hammer had been used for that Purpose. *Hoof.  
inamiGbserv.Phystco-chymie.*

**'BspsAMUM SULpnURIs** MaRtis, **or** *Balsam of Sulphur*"so",'ττ ",so *with Iren. '*

Take clean Filings of Iron, or broken Needles, one Pound-;  
Put them into a Cucurbit,, with five Pounds of Spirit of  
' Salt. Let it stand in a digestive Heat five or six Days, in  
which time the Iron will be almost distolved. Filtre, and  
remove it into a Glass Retort. Place it in the Furnace,  
with a great deal of Sand "about it. Apply Fire of the first  
Degree for one Hour, augment it to the second, which  
continue till no more Drops fall; then change the Re-  
ceiver, and increase the Fire to the third Degree for one  
Hour, and so pass on to the Extremity of the fourth, and  
there keep it sour or five Hours, in which Time red  
) Flowers will ascend into the Neck of the Retort, and  
some yellow Spirit come into the Receiver.- Let all cool,  
and remove the Vessel. In the Receiver there will be  
about four Ounces of a yellow Spirit; and if the Process he  
regular,', about the same Quantity os foliated red Flowers  
in the Neck of the Retort. Take of the Flowers, three  
Ounce's ; of the yellow Spirit, one Ounce : Put them m-  
to a Matrass, and pour eight Ounces of Oll of Turpentine  
Upon them. Let them digest upon warm Sand for twenty-  
four Hours; then augment the Eire, fo as to make the  
Matter simmer for two Houts. Let all cool, and separate  
it carefully from the Fceces, for Use.

This Medicine is by some affirmed to he one of the best Vul-  
heraries in the World:, both internally and externally. It is  
good in all Distempers of the Breast and Lungs, against Gravel,  
and Ulhers of the Reins. It also cicatrizes and heals Ulcers,  
outwardly apply’d; but the Shops are too great Strangers to this  
Remedy, and it is hardly ever prescribed, but very well deserves  
a Place in Practice. Its Dose is from ten to fifty Or sixty Drops.  
*Quincy’s Dispensatory. λ ’*

**ODORIFEROUS BALSAMS** *artificially prepared serem distilled  
.yusrapsttmaj' Oils, Woae, and Pcrnatum'. \**

Take an Ounce of perfectiy pure Pomatum . nielt it in a  
China-vessel over a gentle Fire; then gradually add a Dram  
of white Wax, fine shaved ; ahd aster the two are well  
' mixed, remove the Vessel ; mid when they begin to  
thicken, drop in a Dram of essential Oil, keeping the  
Whole constantly stirring, that it may perfectiy mix;  
after which fer the containing Vessel in cold Water, where  
growing immediately cold, it may keep in the Oll and  
Spirit. When the *Balsamis* thoroughiy cold, directiy put.  
it up into Boxes of Lead or Pewter; which being close  
stopp’d, it may thus be preserved perfect for Yeats. Instead  
of Pomatum and Wax, the express’d Oil of Nutmeg may  
- be here used, aster it has been wash’d so long in Water as  
to become white, tasteless, inodorous, and pure; for mis  
is the common way of preparingtbese *Balsams.* If they  
bre desired of a grateful Colour, this may be easily given  
them by the Addition of a llttle Pigment Thus, for In-  
stance, a Scruple of Cochineal, reduced to fine Powder,  
will tioge an Ounce of the *Balsam* of an agreeable Purple ;  
or-the fame Quantity of the inspissated Juice of Buck-  
\* r thorn of a Green ; a little native Cinnabar, ground sine,  
will turn it of a Scarlet; sine Turmeric, of. a Yellow; or  
a little Smalt, of a Blue: Any of thofe Pigments, there-  
fore, may be used at Pleasure; provided they heve no un-  
grateful Odour, or pernicious Property.

REMARKS.

As these *Balsams* are prepared in the way .of rich Perfumes,  
and in order to wise the languid Spirits, the noblest Oiis,  
either separate, or artificially mix’d, should he used therein ;  
and the principal of this Kind, are those of Baum, Calamus  
Aromaticus, Cinnamon, Cedar, Citron, ’Cloves,.Jessamin,  
Lavender, white Lalies, Marjoram, Macc. Nutmegs, Ori-  
ganum, - Oranges, both thofe of *China* and *Seville,* Roses,  
Rhodium, yellow Saunders : To which we add *Balsam of  
Peru,* and *Balm* of *Gilead,* thefe two-being spontaneously  
fragrant, without Distillation. *Boerhaave'5 Chymistry.*

**- BALSAMUM PHILOSOPHORUM is the** *Aurum Potabile* of  
**the Chymists.**

It would he almost endless to specify all the artificial *Bap.  
fams* which heve been contrived by *Dispensatory Writers.  
Lirnery,* in his *Pharrnacapie Universelle,* has seventy-three dif-  
ferent Sorts, some of thofe above-fnecifvM included; besides

many others in foreign Dispensatories. *Lerncrses* are as sol-  
lows . - \_

*Balsamum Album, Lean. Fdaraventi.* This is very different  
from the *Balsamum Album* taken Nonce of above.

*Balsamum Abstnthiacum, feu Stomachichum, Myastchrt.  
Balsamum ad Nerverum puncturas, de La Frarnbaisterc.  
BalfamumAngelicae, Sennertic ’*

*Balsamum Angelicae reformatum. .*

*Balsamum Anode num vel Podagricusn, Batci.  
Balsamum Antipoda'gulcum, Philip. Alullcri.  
Balsomurn Apoplecticum. . . -*

*Balsamum Apoplecticum reformatum.  
Balsamum Apoplecticum,. Etmulleri.  
Balsamum Arcaei. -*

*Balsamum Aromaticum, Myastchtr.*

*Balsamum aut Unguentum Sympatheticum, Batci.*

*Balfamum Balsaminae.  
Balsamum Beiorardicum.  
Balsamum Cephalicum, Angele Salae.  
Balsamum Cephalicum Italicum.  
Balsamum. Chresti Paracelst.*

*Balsamum Christi Paracelst reformatum.  
Balsamum Cordtale, Angeli Sala.  
Balsamum Gordi ale, Sennerti.*

*Balsamum Dolorem levans. '. -*

*Balsamum Equitis Sancti Victoris.  
Balsamum Galbanetumgiuterinum, Sennerti.  
Balsamum Guidonis.  
Balsamum Heurnii.*

*Balsamum Hispanicum.  
Balsamum Hiollerii.  
'Balsamum Hypnoticum, Anyastchti.  
Balsamum Hystericum, Lud. Penicher.  
Balsamum J acerno de Pinti.*

*Balsamum Italicum. ... - .*

*Balsamum Jofsphi Balsame, Equitis Sanctae Crucis.*

*Balsamum Liimicum Hemistanum.  
Balsamum Lvcatelli. . - - - -  
Balsamum Magistrale, Batei.  
Balsamum Medicorum Florentiae.  
Balsamum Mirabile, Fullers.  
Balsamum -iMirabile, Renodes .. .  
Balsamum Mumiae, Lar.. Riveriil  
Balsamum Nephriticum, Fullert..  
Balsamum Narvale..  
Balsamum Palmeum.*

*Balsamum Paralyticum, Msasechti.*

*Balsamum Paralyticum, Batei.  
Balsamum Psiychresium.*

*Balsamum Polychrastum,' JacoH Le Mort.  
Balsamum Puerorum Dentientium.  
Balsamum Samaritanum.*

*' Balsamum Sengulnemfastens. - - .*

*Balsamum Sarcoticum.  
Balsamum Saturni.*

*Balsamum seu Oleum Benedictum, Apparitii.*

*Balsamum seu Oleum tranquillum. Abbatis Pjujscau.  
Balsamum Solimani.*

*Balsamum Spafmaticum, Myastchti.  
Balsamum Spinale, Batei.  
Balsamum Stypticum, Myastchti.  
Balsamum Sulphuris Anisatum.  
Balsamum Sulphuris Acttimonii.  
Balsamum Sulphuris Compusttum.  
Balsamum Sulphuris Rulandi.. -  
Balsomum Sulphuris Rulandi, reformatum.  
Balsamum Sulphuris strnpiex seu terebinthinatum,  
Balsamum vel Butyrum saccini, Batei.  
Balsamum Venereum, Myastchti.  
Balsamum Uterinum aliud.  
Balsamum Vulgare.*

*Balsamum Vulnerarium, -Follopii.  
Balsamum Vulnerarium, Mindereri.  
, Balfamsan "Zibetha, Myastchti.*

BALUX. - Α Name for the Sand of some Rivers, which is  
mix’d with Gold.

- BAMBALIO. Α Man that stammers, or lisps.  
ΒΑΜΒΑΧ, or Bombax. Cotton.

BAMBU. TheARUNDoTABAXIFERAj which see.  
BAMIA. The fame as ALCEA INDICA, which see.  
BAMMA. \_ The same ni *Embamma.*

BAN. The Name of an *Egyptian* Plant, call’d also  
CALAF, which see. .. i . ,

BANANA, Ossic. Rail Hist. 2. I 375. *Musa caudice macu-  
lato, fractu restio rotunda breviore odorato,* -Cut. jam. I 92. Sloan.  
Hist. 2. I47. *Ficoides, feu ficus Indica, longstscmo latissemcque  
folio, caule maculato,fructu minore,* H. Beautn. 2I. Boerh. Ind..  
A. 2. I7I. *Mufa fructu cucumerino breviori.* Pium. Nov. Gen.  
24. *Sencriae,* Jons. D. I43. *Pacoeira,* Pisi (Ed. I658.) I54.

*Eacoba,* Ejusd. (Ed. I648.) 76. *Pacocira Lusitanis,* Marcg.  
‘I3I. THE BANANA-TREE.^

The Virtues ascribed to the Fruit of this Tree, are, to nou-  
rish much, to excite Urine, and provoke to Venery. It grows  
*in America.*

BANANIERA. A Name for the *Ficus Indica.*

BANAUSIA, βοοναυσία. An illiheral or mechanical Art;  
*Hippocrates,* in his Treatise .περὶ ἐνισχημοσήνης, uses this Word,  
where it seems to mean dishonourable Artifice, or low Craft,  
inconsistent with the Character of a Physician, or a Gentieman ;  
and only practised by Quacks and Pretenders, with a View of  
concealing their Ignorance. .

BANDURA *Congalensium Gentianae Indica species,* P. Ant.  
man. *Planta mirabilis destillatoria,* Grimmli.

It is like Gentian in Seeds and Seed-vessels ; but is, besides,  
remarkably conspicuous for a foliaceous Sheath, or Follicle,  
representing a Penis, which is sometimes much above a Foot in  
Length, and much thicker than a Man'S Arm: It hangs by a  
Leas, and is half full of a sweet potable Liquor.

To this Description *Grimrnius* adds, in the *German Epheme-  
rides,* that the Root attracts the Moisture of the earth, which,  
by the Benefit of the Sun'S Rays ascending into the Plant, stows  
down, by the Stalks and Fibres of the Leaves, into this natural  
Vestel, as into a Reservoir, till it is exhausted for Man’s neces-  
sary Use. These Receptacles, till they come to full Maturity,  
are closed up at the Top with a fine Cover, which sometimes  
falis abroad at the Pressure of the Fingers, and yields the Posses-  
sion of this sweet, limpid, lovely, cool, and comfortable Li-  
quor ; and about six or eight of these Receptacles are sufficient  
to quench a Man's Thirst, with all the Pleasure imaginable.

The Medicinal Virtues are as follows: The Root is of. an  
astringent Quality; the Herb is cooling and moistening; and  
the express'd Juice may be of Service, with some proper distill'd  
Liquor, internally, in burning Fevers; and externally in.In-  
fiammations. Erysipelas, and the like.

It grows not sar from *Columbo,* in moist and shady Woods.  
*Raii Hist. Plant.*

BANGUE, Offic. Park. I624. Garz. ah Hort. 233.  
C. a Costa, 29O. Rail Hist. I. I 59. *Bangue Cannabi simile,*J. B. 3. 44O. *Cannabis Indica trifoliate. Jive Bangue Indorum,*Pluk. Almag. 80. Phytog. 273. *Cannabis peregrina, gemmis  
fructuum longioribus, Bangue dicta.* Hist. Oxon. 3. 433. *Can-  
nabi similis exotica,* C. B. 33Ο. Com. Flor. Mal. 68. *Althaea:  
alia species, foliis Cannabinis, a Garzia ab Horto Bangue dicta,*Herm. Hort. L. Bat. 26. *Ealengi Cansyava,* H. M. Tom. Io.  
I Io.'Tab. 6o. *Ts.yeru-Cansyaua,* ejusd. I2i, Tab. 6I.  
BANGUE. *Dale. . .*

*«Acosta,* who has describ'd it, says, it is almost like Hemp, has  
a square Stalk fine Palms high, of a watry green Colour, hard to  
break, but not so hollow aS the hempen Stalk; but the Rind of  
it is as easy to be drawn into Threads aS that of the other. The  
Leaves are like those of Hemp, green above, and cover'd with  
a Down underneath, and have an earthy and insipid Taste.

The *Indians,* says *Acosta,* eat the Seed and Leaves, to in-  
crease their Vigour in Love-affairs, and to excite an Appetite To  
their Food. The Nobles, and chief military Officers, when  
they are disposed to forget their Toil, and to steep in perfect  
Ease and Security, take of the Powder of the Seed and Leaves  
as much as they think sufficient, and thereto add an Areca, or  
green *Indian* Hazel-nut, and as much Opium as they thinkjit,  
and eat them all together with Sugar. If they desire to he  
entertain'd with Variety of Scenes, and Images of Things, in  
their Sleep, they add some of the choicest Camphine, Cloves,  
. Nutmegs, and Mace. If they heve a mind to be merry, wit-  
ay, and to indulge their Amours, they add Amhergrife and  
Mush, arid make them all into an Electuary with Sugar. It is by  
many affirm'd, that the Seed and Leaves are Very effectual in  
promoting Lust ; whence, says *J. Bauhine,* it appears, that  
this Herb has no Affinity with Hemp, tho' it he Very much like  
it; since Hemp; according to *Diofcorides,* is of an hot .and  
dry Nature, and extinguishes amorous Desires and Motives.

*Ray,* from whom this Account is taken, says, he .learned  
from Sin *Hans Sloane,* that it is a different Plant from  
Hemp.

It grows In *Indostart,* and other Parts of the *East-Indics,*where it is principally in Use. . .’

BANILIA. The same as VANILIA, which see.

BANISTERA. *Houft. . . -*

This was so call’d from a frmous Botanist,1 who lost his Life  
in the Search of Plants in *Virginia.* We have no *English*Name for this Plant.

The Characters are;

It hath a papilionaceous Flower,.which is succeeded hy one  
naked Seed, whose outer Membrane is extended into a winged  
Leaf, after the manner of the Maple-feed.

*Mellen* mentions five Species of this Plant.

These Plants are all os them Nativos in the warmest Parts  
of *America,* where they grow in the Woods, and twist them-  
selves round the Trunks of other Trees op Plants which grow  
near them; some of them grow four or stve Peet high, and

others will rife to the Height of ten, twelve, or fourteen Feet ;  
but must he supported by other Plants, for they do not grow  
erect.

The first, second, and third Sorts grow plentifully in **the**Woods *iferjamaica*; but the other two Sorts were Collected by  
the late *Or. William Houstoun* at *Carthagena,* in the *Spani/h  
West-Indies.* These Plants were call'd Maples, by Sir Haus  
*Sloane* and Father *Plumicr,* from the Resemblance which their

\* Seeds have to those of the Maple; but the Flower differing **so**remarkably from that of the Maple, the late Dr. *Houstotm,*with good Reason, separated it from that Genus, and gave **the**Name of *Banistcra* to them. *Miller’s Dictionary, Fol. 2.*

BAOBAB, or rather BAHOBAn. An *African* Fruit, of  
which *Prosper Alpinus* gives the following Account -; *Bahobab,*says he, is a Fruit as large as a Lemon; it resembles a Gourd,  
and contains black hard Seeds, whose Extremities incline, aS it  
were, to the Form of a Demi-arch; Its Substance also resem-  
bles that of the Gourd, winch, when newly pull'd, is moist,  
red, and of a pretty gratesol acid Taste. This Fruit, when  
newly taken from the Tree, is very grateful to the Taste; and  
in those Parts of *Ethiopia* which are scorch’d with insupportable  
Heat, the richer Sort of the Inhabitants correct it acid Taste  
with Sugar, st is a great Cooler, and a very efficacious  
Quencher of Thirst. I am also inform'd, that in *Ethiopia* 'tis  
used against all hot Disorders, and against all putrid Fevers ;  
but more especially those of the pestilential Kind. They have  
Various Ways os ufing jt in these Intentions ; for they either  
eat its Pulp with Sugar, Or drink its express'd Juice with Sugar,  
or take a proper Dose of a Syrup prepar'd from it. At *Grand  
Cairo* also, where the Fruit cannot be had fresh, they use its  
Pulp, reduced to a Powder, which is like an Earth of a reddish  
Colour, and has an astringent acid Taste, not unlike that of  
*Lemnian* Earth. This Powder is also very much used by many  
against pestilential Fevers, Spittings of Blood, Lienterias, Dy- \_  
fenteries, and the Hepatic Flux; aS also for stopping immode-  
rate Fluxes of the Menses. Some for these Disorders prescribe  
a Drain of this Earth, reduced to a sine Powder, and dissolved  
In Plantain-water. Others exhibit it in Decoctions, and others  
in Infusions. I myself saw one of the Trees, which bears thin  
Fruit, in a certain Nursery ; and it Very much resembled an  
Orange-tree, both with regard to its Leaves, its Bulk and '  
Shape. *Prosipcr Alpinus de Plantii AEgypti.*

There is a sort of Stone also, which, from Its Resemblance  
to this Fruit, is call'd BAOBAB **LAPIDEUM.**

EAPTISECULA. **A** Name for the **CYANUS MINOR.**BAPTISTERIUM. A Font, or Bath, to wash in.

BAPTUS. A bituminous soft Fossil, of an agreeable Smell,  
mention’d by *Agricola. .*

BARA. *Josephus,* in the "third Chapter Of his seventh  
Book concerning the Wars of the *Jesus* with the *Romans,* gives  
us a very fabulous and romantic Account of this Plant, in the  
following Words: " On the North Side, says he, of thatVal-  
" ley- which encompasses *Machcron,* at the Place call'd .Bars,  
" there is a Plant bearing the same Name, which resembles a  
*fr Flame.* Towards the Evening it emits resplendent Rays,  
es and retires when any Attempts are made to lay held on it.  
" The only Means os Preventing its Escape, is, to throw the  
" Urine, or the menstrual Blood, of Women upon it. One  
" cannot touch it without dying, unless he has some of the  
" Root of the same Plant in his Hand. But there is still an-  
(i Other Method ’discover'd of gathering it without Danger:  
" They dig all around it, till only a small Part of its Root re..  
" mains fix'd in the Earth ; to this they tie a Dog, which, upon  
" making an Effort to follow the Person who tied him to is,  
" tears up the Plans, and dies immediately; and thus, by losing  
" his own Life, saves, as it were, that of his Master. After  
" this the Plant may he safely handled ; and has a particular  
am Virtue of removing from .People all Dread of the Dangers  
" they may be afterwards exposed to in gathering it: For Dae-  
" mons, which are nothing else but the Souls of the Wicked,  
" which enter into living Men, and which would undoubtedly  
" kill them, if proper Remedies were not used, are dispossess'd  
" and thrown out, as foon as this Plant is applied to the mise-  
", Table Patients." . . .

**BARACH PANIS. *Rulandus*** explains **this by *Nitrum  
Salis. , . -***

**BARAS. In *Me A. Severinus,* signifies the same as AL-**PHUS, or LENCE.

BARATHRA, βάραθρα. The *Mernphitical* Caves, or *Cha.,  
ronean* Pits, as they are call’d by *Strabo,* go by this Name,  
ς BARBA. The Beard, a Part so well known, that it requires  
no Description.

**' BARBA HIRCL See TRAGoPOGON.**

**BARBA JOVIS.**

**The** *Barba fovis* of *Caspar Bauhine,* the *Jvais Barba pul-  
chre lucens css John Bauhine, sctCJovts Barbasirutex* of *Parkin\*  
son,* is the Silver Bush. *Rail Hast. Plant.*

I don't find any Medicinal Virtues attributed to it.

**The** *Barba Juvis Plinii forte Gesuers,* **is the** *Coggygria,* **a  
Species of Sumach»** *Parkinson,*

The *Barba fovis Plinii* some take to he the *Oleaster Ger-  
manicus. Parkiasm.*

' The *Sempervivum masus* is also call'd by this Name. *Rail  
Hist. Plant, sc "sc . -*’ -τ BARBAREA, Offic. Geri I88. Emac. 243. Ran Hiss 1.809.  
J. B. 2. 868. Mer. Pin. 14. *Barbarea, Pseudo-bunias,* Merc.  
Bot. 1.23. Phyt. Brit. 14. *Barbarea, Carperitaria,* Chain 278.  
*Earbarea flore simplici.* Park. Theati 8I9. *Eruca lutea lati-  
folia, sive Parbarea,* C. iB. Pin. 98. -Rail Synop. 3. 297.  
*Eruca latifolia lutea, seu Barbarea major et minor.* Hist. Oxon.  
2. 230. *Nasturtium Hybernuni,* Thal. 80. *Sifymbriurn Eructe  
'folio, flore lateo,* Elem. Bot. 192, Tourn. Inst. 226. Boerh.  
Ind. A. 2. I5. Dill. Cat. Giff 6.4. Rupp. Flor. Jen. 63. Buxbi  
305. - WINTER-CRESSES.- *Dale.* T

It is a Species of Sisymbrium,-which sends forth many Leaves  
to the Height of a Footat.d a half, spreading, hollow, bearing  
Leaves less than those of Radish, and having some Resemblance  
to those of Cresses, of a blockish-green Colour, and shining r.  
The Flowers are littie, yellow, each consisting of four Leaves,  
disposed mine Form of a Cross ; they are succeeded by little  
Pods, which are long, round, and tender, containing reddish  
Seed: The Root is oblong, moderately large, of a sharp Taste ;  
it grows in the Fields,.and is cultivated in the Kitchen-gardens  
.lor Sallad. It contains a great deal of essential Salt and Oil.

It is detersive and vulnerary; it exciteS.Urine; it is Very good  
for the Scurvy, for the Diseases of the Spleen, and sor the nephri-  
tic Colic. It is used externally and internally. *Lemery des  
Drogues. ' si siso T'" ' ...*

This Herb grows spontaneoully in moist and sandy Places,  
upon old Walls, in Cross- ways. Meadows, and on the Banks of  
Rivulets. It has the same Virtues and Qualities with the Cresses.  
It is good for the Spleen, and cures the Scurvy, and Wounds.  
It is sometimes used all .alone, and sometimes mix'd with other;  
Herbs.' Its Leaves, bruised, and infused with Wine and Sugar,  
are excellent for the Scurvy. The express’d Juice of the Herb  
cutes a-Defluxion of fetid and scorbutic Humours in the Mouth,  
Bleedings and Looseness of the Teeth, and Excrescences of  
the Mouth,, if .the Gums are rubb'd with it. It is of a drying  
Quality, and cures impure and fetid Wounds, when mix'd with  
other Vuinerary Ointments.. The Herb, boil'd in Wine or  
Milk, cures Sciatic Pains, if Lint is soak'd in it, and apply’d  
hot to the Part affected. Of it, together with tepid Water of  
unripe Oranges, an excellent Medicine is prepared, against the  
Gout of the Feet and Knees, or Sciatic Pains. *Chahr.*

' The Seed provokes Urine, and expels the Stone; and may  
also he used in Sinapisms and Vesicatories. *BarthoL Zorn,  
Boianolog.*

BARBARUM. An Epithet for aPlaister for green Wounds,  
*in Scribonius Largus.*

BARBOTA, the Parbut. A small River-fish, with a  
very large Head. It is generally about six inches long, or  
more.

In the Choice of this Fish, take that which is well-fed, ten-  
der, delicious, and agreeable to the Taste. It yields pretty  
good Nourishment, and is easy enough of Digestion.

This Fish is a littie too soft and Viscous. The Row, as well  
as that of the Eel-powt, is not to be eaten; for it will work  
both upwards and downwards. \*’

It contains much Oil, Phlegm, and volatile Salt.

It agrees, at. all times, with young People of a hot and bill-  
ous Constitution. .’

REMARKS.

This is a small River-fish, well known to Fishermen, that lives  
upon Mud and Slime: Several nice Palates there are, who  
do not much esteem it, because, they allege, it tastes Of the  
Ordure with which \*tis fed. \*

-Its Liver is well-tasted, and Very large, in Comparison to the  
Bigness of the rest of its Body. Some Authors allure us,  
there is no other but this Part Of the Fish., that is good to he  
eaten. *Lernery stn Foods. ‘*

This Fish is Very rare in *England*; but is sometimes found  
in the River which runs by *Tamusorth iuWamaichjhire.*

BARBUS, Offic. AldroV. de Fife. 597. Charlt. de Pish 37..  
Schons. Ichth. 29. Ge so. de Aquat. I23. Rail Ichth. 259.  
Ejusd. Synop. Pile. i2 I. Rondel, de Pisc. 2. 194. SalV. de  
Aquat. 86. *Barba et Barbus,* Mer. Pim I89. *Barbo,*Schrod. 5. 325. *Myflus fluviatilis, Barbus,* Bellon, de Aquat.  
3d. THE BARBEL. *Dale, et .’ ,*

The small Barbels are to he preferPd before the large, because  
they are easier of Digestion. They should be also taken in:  
pure running Waters. There are two Sorts of them. One os  
which is bearded, and the other not. ’ . -

This Fish is very nourishing, and even proves solid and dura-  
ble Food enough. It is als0 look'd upon to be good for the  
Colic, Piles, and Stinging of venomous Creatures. They also  
pretend, that it allays Venereal Inclinations: But I am not cer-  
tain, that all these Virtues, which are attributed to it, are  
grounded upon solid Experiments,

.. This Fish Is a little hard, and not easily digested; and a Cer-  
tain Author says, that the Wine wherein it hath been steep'd  
and boil'd, makes Men and Women barren.

It contains much Phlegm, Oil, and Salt, that is almost all  
Volatile. . ' .

It agrees, at all times, with young bilious People, those who  
have a good Stomach, and are used to much Exercise Of  
Body. . .. - . ‘

REMARKS1.

Barbel is a Fish of an oblong Form, and middle-sized, and  
heset with large and- tender Scales. It was antiently conse-  
crated-to *Diana.* It breeds three times a Year. It is by  
some call'd *T.rigla,* according to this Verse:

*Accipiunt T.rigla terno cognomina partu.*

This Fish is a little hard Io be digested, by reason of some gross  
Juices contain'd therein: In the mean time, these same  
Juices make it Very nourishing, and good durable Pood. It  
has a good Taste; and the old *Romans* esteem'd it Very much,  
which made them put it amongst those that went at an ex-  
cessive Price, as several faithful and true Historians have  
assured ns.’ The Liver is that Part of the Fish that is mosh  
esteem'd for the Goodness of its Taste, and the Head next.  
But *Galen* speaks {lightly both of the one-and the other, not.  
only upon the account of the Taste, bur also Health. *Lemlum  
ry an Foods.*

The Spawn Of the Barbel, at some Seasons of the Year, is a  
most Violent Vomit and Purge. . .

. BARDADIA. A Pound, *Libra. Rulandus.*

BARDANA MAJOR, *Lappa,* Offic. *'Bardana mayor.*Ger. 665. Emac. 809. .Pali Hrst. i. 332. Synop. 88. Schw.  
27. *Bardana vulgaris mayor.* Park. I222. *Lappa mayor.  
Arcium Diofcorides,* C. B. I98. Hist. Oxon. 3. I46. Tourn.  
jnst.450. Boerh. Ind. A. I46. Dill. Cot. I68. Buch. I79.  
*Personata sive Lappa mayor aut Bardana,* J. B. 3. 570.  
*Persimata, Lappamayor, Bardana,* Chain514. BURDOCK.  
*Dale. .....*

The Root of the great Burdock runs down deep into the  
Earth, pretty large and thick, of a blackish Colour on the  
Outside, and white within, from which spring many large  
Leaves cover'd with a hoary Whiteness underneath,- and green  
above ; Of a roundish Shape, yet pointed at the End, and hol-  
low'd in, next the Foot-stalk, indented about the Edges, **and**many times so large as to cover the Head and Face from the  
Sun. The Stalks are large and thick, full of a whitish Pith,  
somewhat downy, and often Of a purplish Colour; they are  
divided into many Branches, on which grow smaller Leaves,  
and on their Tops a great Number of scaly Heads or Burs, **the**End Of every Seale terminating in a hooked Point, by which  
it sticks Very tenacioufly to Garments. From the Middle of  
these Heads arise hollow fistular Flowers of a purple Colour,  
and they are succeeded by oblong, flatfish, and angular brown  
Seed. This Plant grows every-where by the Way-sides ; and  
flowers in *Tune* and *July.* The Roots, Leaves, and Seeds, are  
used. /

The Roots are sudorific and alexipharmic, and good in malig-  
nant Fevers, and are therefore put in Quantity into the *Aqua  
Trcriacalis.* They are likewise useful against the Gout, and-  
Pains in the Limbs. The Leaves, hell'd in Milk, and apply'd  
as a Cataplasm, rare good for the same Distemper. - They are  
likewise good for Burns and Inflammations, and are one of the  
Ingredients of the *Unguentum Populneum.* The common Peo-  
ple frequentiy apply them to the Feet and Wrists in Fevers.  
The Seed, powder'd, and given in white Wine, is good to  
provoke Urine, .and help Fits Of the Stone, *Metter's Bat..*

BARDANA ARCTIUM, Offic. *Lappa mayor montana,  
capitulis tomentosts,feu Arctium,-C.* B. 198. Tourn.Jnst. 450.  
Boerh. Ind. A. I46. . Dill. Cat. I62. Buxb. 174. Hist.  
Oxon. 3. I47. *Bardana mayor altera.* Ger. Emac. 810.  
Rail Hist. I. 332. *Bardana mayor, lanuginosis capitulis.* Park.  
1222. *Bardana montana,* Schw. 28. *Personata feu Lappa  
altera, cum capitulis villosis.* Chain 5 I4. *Personata altera, cum  
capitulis villosis,* J. Β. 3. 57.I. *Personata montana, capitulis  
magis tomentosts.* Rail Synop. 88. WOOLLY-HEADED  
BURDOCK. ? .. '

It grows in ruinous Places, and by the Sides os Paths; and  
flowers *inJuly.*

The Root and Seed are used in Medicine, and agree in VirJ  
fries with the former. The Root, with the Seed, boil’d in  
Wine, mitigates the Tooth-ach, if the Decoction he held in  
the Mouth; and the fame is used to foment Burns and Chil-  
blains. It is drank in Wine *for* the Sciatica and Strangury.'  
*Dale.*

BARDANA, Offic. *Bardana minor.* Ger. 664. Emac.  
809. Scbrod. 4. 25. Schw. 2g. *Lappa minor, Xanthium  
Dtoscortdic,* C. B. iOS. *Xanthium,* Elem. Bot. 348. Tourn.  
Irish 439. Boerh. .Inch A. 2. 103. *Xanthium, suye Lappa  
minor,* j. Βν. 3. 572, Rail Hist. I65. Synop. 55. Chain

5’4. Hist. Oxon. 3' 6C4. Park. I223. Binds. 342. - *Mar..  
rallumeta Maiab.* Acts Philofoph. Lond. N0. 224. p. 3I8.

- LOUSE-BUR. *Dale.*

This is a much frnaller and lower Plant then the common  
Burdock, having usually but one Stalk, and that not very  
much branched, growing somewhat more than a Foot high, a  
little downy, round, .and frill of black Specks; having its  
Leaves growing on long Foot-stalks, which are in Shape like  
those of Marshmallows, but broader, and not ro long, .waved  
about .the Edges of a yellow *-green Colour, somewhat* rough  
on both Sides. The Flowers grow towards the Top, of a  
greenish Colour, and staminous. The Seeds do not succeed  
the Flowers, but come forth among the Leaves ; being long  
and roundish, full of large hooked Spines, divided into two  
Parts, each holding .one long Sced. The Root is finall, fibrous,  
and perishing, after it has ripened the heed. It grows but in  
sew Pisces in *England,* and that only in a rich and fat Soil ;  
particularly, it is found on the small Common hear *Dulwich,*and gives its ripe Seed in *September.*

It is but very seldom that this Plant is used, thol some com-  
mend it against scrophulous Tumors, the Juice being taken  
inwardly, and the Leaves apply’d to the Swellings. *Matthiolus*extols it much, as an Herb of great Service against the Leprosy.  
*Millar Bot. Oof.*

BARLERIA. " ; jo. \_ . .. .. . .

This Name was given to this Genus of Plants, Sy Father  
*Plumier,* in Honour of *Jacobus Barelicr* of *Paris,* who was a  
famous Botanist. We have no *English* Name for it; but the  
Inhabitants of the Island of *Jamaica* call it *Snap-dragon.*

The Charactirs are; . ’ . . i

It hath a perfonated Flower,, consisting of one Leaf, whose  
upper Lip or Crest is erects hut the under is divided into three  
Parts ; from whose Empalement tifes the Pointed in the hinder  
Part of. the Flower, which afterwards becomes a quadrangular,-  
oblong, membranaceous Fruit, with one Capfule, in which are  
lodged flat roundish Seeds.. . ' . . . -

*. Miller* enumerates two Species of this Plant. - .

I don’t know, that any Medicinal Virtues are attributed  
toiln ' *-- : s-*

BARNA. *Johnsen* explains this by *Vas Vitreatum.* I sup-  
pose he means a glaz’d Vessel.

-BARN ABUS. *Rulandus* explains this, if it may be call’d -  
explaining, by *Earnaas. Sal Petra Urinarium , Urina Salis  
Petrae , Acetum acerrimum.*

BARNACLES. These are Birds very common in the  
North of *England* and *Scotland,* remarkable for being the Sub-  
ject of an extravagant Fable, gravely related by *Gerard,* whicti  
is, that they are produced from the Shell of a Fruit, which,  
'falling into the Sea, opens and lets out the young Barnacle.

The Barnacle is a very, rank, and highiy alcaleseent Fond,  
and esteem’d by some as a great Dainty.

I don’t know whether it, is, the same as the *Vulpanser,* or  
different. See Vulpanser.

BAROMETRUM, a Barometer. An Instrument for

' measuring the Gravity of the Ain. . ' \_

BARONES. Small Worms, called also *Nepones* by *Jo-  
hannes Anglicus.*

BAROS, βάρος. Properly, Gravity. . *Hippocrates fre-  
quently* uses tbisWord, to express an uneasy Sensation of Weight  
or Gravity in any particular Pare

Βαρυς signifies vehement, violent, acute, or heavy, in Me-  
dicinal Writers.

BARURAC, Glass. *Rulandus.*

BARYE CO IA, βαρυηιοοια, from βαρυς, dull, heavy, and  
ἀκουω, bear; Duiness of Hearing.

BARYOCOCCALON. A Name for the *Stramonium,*Thorn-apple, which see. *Blancarde*

BARYPHONIA, from βαρυς, dull, heavy, and φωνὴ, the  
Voice. Difficulty of Speaking. *Blancarde*

BARYPICRON. . A Name. for the *Absinthium Latifo..  
Hum. Blancarde . ...*

BASAAL, The Name of an *Indian* Tree, which grows  
in fanry Places, especially near *Cochin.* It flowers, and pro-  
duces Fruit, once a Year, from the first Year of its Bearing to  
the fifteenth.

A Decoction of the tender Leaves in Water, with an Addi-  
tion of Ginger, is uled as a Gargarifm in Affections of the  
Fauces. The Berries fry’d in Butter are made into an Oint-  
ment, with which they anoint the Forehead and Temples of  
those who are affected with Ἀ Phreofy, and. with very good  
Effect, as they fay. TheKemeis of the same kill Worms. *Ray,  
Hist. Plant.* I570.

BAS ALTES. A rough Stone, of the Colour, and aimost  
the Hardness, of Iron, which renders it difficult to he cut.

BASANISMOS, βασανισμὸς, frorn βάσανος, a Touch-  
stone. It signifies the investigation. Examination, Or Trial of  
- a thing.

BASCANON, βάσκαιον. Fascination.

-BASELLA. Cinnbing Nightshade, from *Malabar.*

The Chatadlers arc ;

It heth an annual Root: The Stalks are climbing, and of  
a purple Colour: The Leaves are round, thick, succulent,  
and of a dark-green Colour. From the Foot-stalk of the  
Leaves are produced Spikes of Flowers, which are Male and  
Female, in different Parts of the Spike : The Female Flow-  
ers are succeeded by stat Berries, in each of which is contained  
one hard Seed. ... ,\* . .

*Miller* enumerates three Species of this Plant. There is no -  
Medicinal Virtue attributed to this Plant, that I.know of

BASIATIOi The fame as AMPLEXATIo, which fee.

. BASILAREOS. A Name for rhe *Os Cuneiforme.*

.: BASILEION; βασίλειον. - An Epithet for a Collyrium, de-  
scribed byAEtias. .. . ' . ἐν ' ’ -

BASILICA VENA. The Basilic Vein in the Arm. See.

**VENA.' . ;**

BASILICON. An Epithet for an Ointment, or Cerate,  
described in *Attius TetraViblos,* 4. *Serm.. 2. Cap.* 2I. very  
little different from that of the College. *Quincy* is therefore  
mistaken, when he attributes the Invention of it *suMesue.*It is thus prepared as directid by the College .. '

Take of yellow Wax; set Rosin, and Pitch, of each one  
, Pound and a half; of Oll, nine-Ounces. Mix them to-  
gether into an Ointment by melting, S. Ἀ \

It heth been continued the fame *thro\** all the officinal Disperi-  
fatories, especially those of out College, and is mucin ofed io  
incam Wounds ; tho’ of late our Surgeons begin to substi-  
tute, for fuch Intentions, .Dressings thet are not so liable to  
produce Fungosities, one of which is the following.

**UNGUENTUM BAsiLIcoN FLAvUM,\*** *The Yellow Royal*

*1 . ' Ointment: . ‘ '*

Take of yellow Wax, and Resin of the Pine-tree; of each  
three Poundsof *Strafiurg* Turpentine, twelve Ounces ,  
of Linseed Oil, three Pounds six Ounces.. Melt them  
over a stow Fire, and then put in three Pounds of *Bur,  
gundy* Pitch,, and let them all melt together into an  
Ointment, *S. Ac* S '.,

This was never before in any officinal Dispensatory ; and it  
heth the Reputation of a very eminent Person for its Author.  
It seems, if any Regard was had in its Contrivance to Ex-  
ample, to have chiefly followed the *Unguentum Aureum* **.of***Mnfues* but this is a much neater Composition than that r  
tho’ heth pretty nearly agree in Intention. *Nicolaus* hath, in-  
deed, a Prescription under the Title of *Unguentum Bafdicon  
Citrinurn,* which the *Augustan* Dispensatory hath transcribed ;  
but that is'a very injudicious Medley of Ingredients of different  
Virtues, notwithstanding *Zwelser* takes a mighty deal of  
Pains, in his Animadversions, to dined the .manner of com-  
pounding is. All the *London* Dispensatories, before the last,  
have likewise retained from *Mesae* an *Unguentum Bastlicrn ma.,  
jus* ; but if is a most perplexed Mixture, and never used, and  
therefore very justly omitted here. *Quincsu Dispensatory.*

*Bastlicon* is also an Epithet for a great many Compositions,  
to be found in the antient Medicinal Writers. It signifies  
*Royal. . .*

BASILICUM. - ' .. - .

*Ocimum Bastlicum,* Offic. *Ocimum medium 'citratum.* Ger.'  
547. Emac. 673. *Ocimum vulgatius,* C, B. Pin. 226. Raii  
Hist. I. 547. Tourn. Inst. 204, Boerh. Ind. A. I7o. Rupp,  
Flor. Jen. I78. *Ocimum medium vulgatius et nigrum, I.* B.  
3. 247. Chub. 4I9. *Ocimum vulgare majus.* Park. Theat.  
I8. *Bastlicum, seu Ocimum, medium vulgatius,* Hist. OX. 3.  
406. COMMON BASIL. -

The Basilicon of *Hippocrates* is, by most interpreters, thought  
to be the *Ammi,* Bishops-wced. But whet now goes by this  
Name, is a different Plant.

This is a tender Plant, growing aheut a Foot high, branched  
from the Bottom, having two. succulent, roundish-pointed  
Leaves, set opposite at a Joint on pretty long Foot-stalks, in  
Shape like those of Pellitory of the Wall, but larger ; little  
or nothing indented aheut the Edges ; the Stalks are four-  
fquare, somewhat heavy, not very full of Leaves, having on  
their Tops thin verticillated Spikes of white galeated and lahi-  
ated Flowers, having two small, round, green Leaves set un-  
der each Whorle of Flowers, The Calyx is large and open,  
containing four, finall, round, black Seeds. The Root is  
small, fibrous, and perishing with the first Frosts. The Leaves  
and Tops have a pleasant fragrant Smell, especially when gently  
rubbed. It is sown in Gardens, and flowers *in July* and  
*August.*

Basil, tho\* it has a fragrant, and to most a pleasant Smell, is  
but llttle used in Physic. The Antients condemned the inward  
Ufe of it, as hurtful to the Sighs. *Schroder* fays, it cleanses  
**the** Lungs *of* Phlegm, and provokes the Menses. It is an in-  
gredient in the *Aqua Bryonia Cerpposeta* or hysteric Water.  
*.Millers Bet. Oof.*

*Hoffman* says, that the Chymical Oil of Basil is extremely  
fragrans, and friendly to the Head and Nerves.

- BASILIDION- The Name of a Cerate describ’d by *Galen,*and recommended for the Itch. . . .

. BASILS. The Name Of a liquid Collyrium mention'd hy  
*Galen. . . ’ - si \* .*

-- BASILISCUS, -the Basilisk. A Very poisonous Serpent,  
which is the Subject of many extravagant Fables. Ἄ Bind also  
is fabled to be produced from the Egg of a Cock, which is the  
most poisonous thing in Nature.

. In Chemistry, the Philosophical Sublimate Mercury is call’d  
*Basiliscus.* And. a Stone goes by this Name, which some ...  
Chymists have boasted would kill Mercury, and congeal it Ί  
into Silver, without Fine. The. Philosopher's Stone is also  
called by this Name. *Paracelsus* names the Venereal Disease .  
*Basiliscus.* ' ῖ

BASIOGLOSSUS.’ One of the Heads of that Muscle of  
the Tongue called CERATOGLossUS, which see.

- BASIS, βάοϊς, from βαίνω, to go. The Support of .any  
thing, upon which it stands, or rather goes, according to the  
^original Import. Thus *Hippocrates* calls the Sole, or Bottom  
of the Foot, the *Basis of the Foot,* in his Treatise *de Articulis'.*The superior Part of the Heart is, however, called its *Easts,*to distinguish it from the Apex, or small Point: .. ? '

The *Basis* of a Compound Medicine, is that Ingredient  
winch enters it in the largest Quantity; or sometimes, which  
is os the greatest Importance.

" BASIUM, a Kiss. I don't know, that this Word belongs  
Inore properly to Medicine, than to any other Science; but  
it is sometimes mentioned aS a ready way of taking Infection in  
all contagious Distempers ; especially in Venereal Disorders,  
when an Ulcer resides in or near the Lips, of which there are  
Tome Instances. - 7

’ - ' Figuratively it signifies an extemporaneous Tincture os *Mary*and *Fenus,* that, is of Steel and Copper, invented by *Clesseus,  
' Castellus,* r ~ . - --

' ' BATEMAN'S- PECTORAL DROPS. See BALSA-  
**HUM- ANODYNUM. -.foe** ’ ’’ .S 7 Ἀ

BASSI COLICA. The-Nanie of a Medicine in *Scribp-  
Anius Largus,* compounded of Aromatics and. Honey; *Mar-  
- cellus Empiricus* mentions It. It .is taken notice os also by  
*\* ‘ Aetius* and *Actuarius. - :* ί . . ; / - - .

RASURA. *Eulartdus* explains this *by Semen. .*

BATHMIS, βοθμἰς, a-seat. Basis, or Foundation, it in  
iised by *Hippocrates* and Gance - to express a Sinus or Cavity of  
a Bone, winch receives the Protuberance os-another at the’  
Joints ; particularly those at the Articulation of theDumerut  
and Ulna. ' S .s so-' ""

BATHRON, βάθρσν, or-βάθριν, aS it is written *iDHippo-  
cratesfa* Treatise *de Flatibus.* The Seat; or Support.- Thus,  
in the Treatise just quoted, it is said, thet the Air is the *Susa.  
port* of the *Moon.- ' - - -* si'\* \ . i ' ~ '

*- Bathron* also.stgnisies. .the *Scamnum Hippocratis,* an Instru-  
ment invented for the Extension of fractur’d Limbs. The  
Surgeons have -laid it aside at present, and make use os more  
commodious Instruments. -The-Curious may see R Description  
**os** it in *Ontbasius de Machinamentis, Capi teayi ' ScustetusNsgr*describes, is. \* - χ;'.? ' -.γ .S ἐν.

. - BATHYPICRON. A -Name for the *Absinthium laiifoz.*

*Hum. Blancarde ' ’ ....... .... .. . c....*

- BATHYS. A Sort of Cheefe which People of Distinction  
*in Rome* used to eat. *- Galen* says it is the best Sort of Cheese ,  
that is, that, os all Sorts ofCheese, It is the best Aliment. *De  
Aliment: Facultat. Lib.* 3. *Cap: iJ: - - '* . iViiy. .. ;

BATIA. A Retort. ' '----- *i - . .. so foe. -.si*BATINON MORON. The Raspberry. *Bsimcand.*

. BAITS, *Saric.* The *Crithmum* is thus cslled,.and also *Bap  
iicula. ... ‘ si"''* J'.. ’s' . .s

*Baiis* -is also the *Thornback.* See RAIA; - / I ‘ εἴ

ώ *Hippocrates* makes mention *os* this Fish; and- directs the  
Tongue aS a Pessary to- he used in a Redundance Of the  
Menses. ’ - ssssdurdur . .-c j).. - : -

BATITURA. The same as BATTITURA, which fee. : ;

r BATOS, βάτος, a Bramble, or Briar. Λ si ' ‘ ' J

BATRACHIOIDESt Thia is, according to *BlancarA,* a

Species *Cd Geranium,* resembling the *Ranunculus.*

' BATRACHITE6. A Sort of Stone, which takes its Name  
from βάτραχος, a Frog, as the *Nufonifersm.es* from the Toad?

It is *of* no Use, thatI know osi**V' Ἀ - J'". si***s ' '* BATRACHIUM. -Ἀ Name for she; RANijNcULUs,  
which see.- : - ’ . - *\ :su'N susc* **τ .**

BATRACHUS, βάτΑαχος,,.τα an inflammatory Tumor,  
which rises under the TOnghe, especially! her Children. *P.  
AEginet. Lib.* 3. *Cap.* 26. .

It is a Tumor of the Parts noder the Tongue, especially of  
the -Veins. *Aetius,.Teirab. sc../ Scrm. es Gapo ^fi.* See RA-

BATTATAS HISPANICA ' 4.^ ss ss - Ἀ .

*Batatas,* Offic. Co B. Pin. 9r. ju S. 2. 7oo. *Balatas  
planta peregrina, IndicADamotes, Amotis, -et Aies ctiant dicta.*

*Clusii,* Chab. 239. *Battatas occidentalis India,* ‘Park.  
Theat. I 383. *Battaids- Hispanorum,* Pared. 5I 7. *Convol-  
vulus Indicus Batatasstictus,* Rail Hist. I. 723. Pluic. Almass.  
II4. *Convolvulus Indicus, radice rubcrosa eduli, cortice rubro.  
Batatas dictus.* Pared. Bat. Prod 325. *Indicus Orientalis Iu-  
Fama, feu. Batatas, Sis.arum Pcrtevianorum, seu Battala Hi-  
spanorum,* Hist. Oxon; 2. II. *Pattata radice iuborosd efculentd.  
Spinachiafolio, store albo, fundo purpureo, femine post singulos  
stores singulo.* Cat. female. ^3. Hist. i. I5O. *\Sisuram Peru-  
vianum, five Battatas His.panorurn,* Ger. Emac. o25. *’ J rtica,  
vulgo Batata,* Pis. 93. *Jotsca Brasiltensibus,* Marc2. io.  
*Kappa-kdenigu,* Hort. Mal. 7. Q5, SPANISH POTA-  
TOES. ; , ἐν - - ' ' -  
They are used either boil'd or roasted under the Ashes. They  
are ofa fine Taste, and by some preferred to our Turneps. If  
they are taken new, .and bruised, and macerated with a lit- '  
tie Water, they ferment of their Own Accord, and produce  
a Drink used by the Inhabitants of, *Brasil. . . - ‘*

: They grow spontaneoufly in *Nevtfoundland,* and the neigh-  
bouring .Blands ; whence they .were first’ brought into *Spain,*and thence into other Countries of *Europe, Raii Hist. Plant.*

BATTATA VIRGINLANA, Offic. Park. Theat. 1383.  
*Batiata Virginiana,siue Virginianorum, et Pappus,* Ger. 781.  
Emac. 927.: *Papas Assirticanum,* J. Β. 3. 62I. *Papas Ame-  
ricanum Pycrioclenum, Ofianank Insulae. Virginies radix Chunnc,.*Chain 523. *Papas sea Battatas Virginianurn,* Park; Paradi  
5I7. - *Solanum tuberosum esculentum, C.* B. Pim 167. Prod.  
89. Ran Hish I. 675. Synop. 3. .265. Hist. Oxon. 3, 522»  
Tourn; Inst. I49. Elem. Bot. I24. Boerh. Ind A. 2. 67.  
Ruppi Flor. Jen'. 37; Buxh. 3O6. "VIRGINIA, COM-  
MONEY CALLED IRISH POTATOES, Dale.

*in Virginia* it grows spontaneoufly, but with us is cultivated  
in Gardens; It flowers in the Months of *ftene* and *July.* Its  
Root is only in Use ; and that too in the Kitchen, but never  
in the Shops. It seems to agree, as to its Qualities, with the  
*Spani/h* Potatoes, but is somewhatnarcotic. *Dale. " ‘*

- You are to chuse those which are large, plump, tender, red-  
dish without, and white winhin, arid of a good Taste, like that  
of an Artichoke.

' They nourish the Body, moisten much, and allay the sharp  
Humours of the Breast; but yet produce gross Humours, and  
siaufe Wind. -

- They contain a little Salt, but much Oil and Thlegm.  
' They agree at all times with yoimg bilious People, and those  
in general, whose Humours are very sharp, and much agitated.

. E ? REM A R.R s.

*Potatoes-art*thy some called earth Pears; because they grow in  
ε the Earth to the Branches of the Root that hears them.

They were brought originally from the Country of *Tapi-,  
nambour,* in *India,* and they are now much used for Food.  
They are nourishing enough,, and allay the sharp Humours of  
the Breast by their oily and balsamic Principles, which are apt  
to unite to those Parts that want recruiting, and to embarass  
. the sharp. Salts that. Vellicate the Breast. They produce gross  
\_ Humours, and Wind, because they contain a Viscous and  
v- think Juices *Lemery on Foods.*

*Popli toes* are. extremely emollient, and consequently good to  
“ prevent and onre. Disorders proceeding from, or attended  
’with, a Rigidity or Stricture of the Fibres. Hence it is a  
L very proper Food for those who use much Exercise.

BATTATA CANADENSIS, Qssic. *Battatas de Canada,*Park; 1383- Parad. 5I6. *Flos solis pyramidalis, parvostore.,  
tuberosa radice, Holiotrapium Indicum 'quorusidam.* Ger. Emac.  
753. Ran’Hist. T. 335. *Flos solis tuberosus Indicus, sivae  
Adlumes Canadensis,* Grist. Viridi Lnsitim. *Corona solis, parva  
flore,Aubcrosa radice,* Elem. Bot. 39 I. Tourn. Insta ψ89.  
Boerh. Ind. A. 1O2. *Helidnfloemum Indicum tuberosum,* C. B.  
27-7. *Helenium Indicum tubcrofum,.ti.R. P.* 85. *Chrysuns.  
ihernum Indicula, Addice tubero nd,* Herm. Hort. Lugd. Bat.  
142. Plulr. Almag. 99. *Chrysanthemum perenne majus, foliis,  
integris, Amcricanum tuberosum.* Hist. Oxon. 3. 23. *Chryson.,  
thernwn Canadenso strumosum.* Florent. Schw. Cat. Leyd. 22.  
*Fdossolis Farnesianus,sue Asser Peruemus tuberosus,* Col. Ecyh.  
2. TIt *Flos solis tuberosus, seu Flos Farnesianus,* Aldin. 9I.  
JERUSALEM ARTICHOKE, Dale.

~ Itn is Cultivated in Gardens, and only applied to culinary  
uses.-: ------sitio--;---- -- - ------ -

c BATTITURA. The Squamae or Seales of Metals, which  
fly off, whilst under the Hammer.

\* BATCIA. - According th *Plancard,* a Name for the *Pustso  
naca Syluastrio. su*

“ BAUDA. A Vessel for Distillation. *Rulandus.*

BAUHINIA. Mountain Ebony. ’ *Fulgo.*

’ This Plant was so named by Father *Plurticr,* in Honour **of**the two famous Botanists, *John* and *Caspar Bauhine.*

' The Characters are.; -

It hath a polypetalous anomalous Flower, Consisting of **five,**or more-Leaves, which are disioosed on-on» Side ; from-the

Flower-cup arises the incurved Pointal, accompanied with several  
Stamina of the same Form, which afterward becomes a Pod in-  
dosing Kidney-shap’d Seeds.

*Moller* enumerates seven Species of this Plans.

HAUL, Urine. *Rulandus. ; so*

BAURAC. The *Arabic* Word for Nitre; or sor any Salt.  
*Rulandus.* Hence Borax took its Name.

BAXANA. An *Indian* Plant thus distinguish’d. . . . .

*Banana Arbor venenata,* J. B. *Arbor fructu venenate. Radice  
venenorum antidoto,* C. B. ♦

Near *Ormuz, in Queumne,* a desart Island, there is ,a Tree  
call’d *Βαχαηα,* the smallest Quantity of whore Fruit suffocates  
the Person who tastes it. The same Effech is also produced by  
remaining a Quarter of an Hour under its Shade. But, since  
the Root, Leaves, and Fruit of this Tree, which is call’d *Ida.  
iuxit,* are, in other Countries, Antidotes against all kinds of  
Poisons, these Circumstances to me appear improbable. *Raii  
Hist. Plant. ,*

BDALSIS, βδἀλοτς, from βδἀλλω, to stink, of milk.  
Suction, or Milking. . t

BDELLA, βδέλλα. A Horse leech. *'Hippocrates, in his*second Book of *Prorrhetics,* seems to mention the βδέλλα, as a  
Cause of Bleeding .at the Fauces. As it is not very easy to  
conceive hew this Animal should get to that Part, some have  
thought that βδέλλα, in Ibis Place, signifies a varicose Vein, as  
it does in *Diofcorides. But Galen* contradicts this, and fays it  
really means a Horse-leech, which may accidentally get thi-  
ther. - .

Leeches, when swallow’d, are esteem’d os bad Consequence ;  
Therefore *Celsus* advises to drink, by way of Antidote, Vinegar  
with Salt, 25.5. C. 27. - - -

We know that a Leech has been swallow’d,''when the  
Mouth of the Stomach has a Sensation of being suck’d and  
bitten; Sometimes also, when the Leech fixes on the Throat;  
the Patient, in Spitting, brings up a florid Blood. Berne, the  
Succus Cyrenaicus, the Leaves of Silphium or Beets, with  
Vinegar, or Snow dissolved *in Posea,* (a Mixture of Water and  
Vinegar) are proper for diflodging and bringing them away.  
The Patient must also use Gargarisms of Water and Nitre, or  
Vinegar and Vitriol. Leeches, ..which-six on the inner  
Side of the Throat, may be distodged by ordering the Patient tor  
sit upto the Neck in warm Water, and hold cold Water in his  
Mouth; for they will come out forthwith in Quest of a cold Li-  
?uor, to which they have heen accustom’d. Some prescribe Bugs  
κίρεις) for those who have swallow’d Leeches*, but,* says *Galen,.*I never bad Occasion *for* prescribing them, since I found Gar-  
lick effectual in these Cases. *- Paul. Aigineta, L. ζ. C.* 36.

..I don’t know, whether *Paulas* means, by κορεις,.-Bugs,  
*Cimices,* as *Cornarius* has tranflated it; or a sort of *Hypericum,*mill’d by *Diascorides rduri.* ; See HIRUDO.

BDELLERUM, according to *Johnsen,* also signifies a  
Horfe-leechi .- -

BDELLIUM, Ossic. Park..Theat. I57I. C. B. Pin.503.  
J. B. I. 3Iy. Chab. 73. Mont. Exot. II. *Bdellium omnium  
auctorum,* Raii Hist. 2. I&44. *Bdellium gurnmi,* Ind. Med. IS.  
GUM BDELLIUMi *Dale.*

*Bdellium* is by some call’d *Madelcon,* by others *Belchus.* - It  
is the Tear ofa *Saracenian* Tree. .-

The Marks of its Goodness are, a bitter Taste, Transpa-  
. rency, a Resemblance of Bull’s-glue, a Fatness of the inner-  
most Parts, and an Easiness to he soften’d; its being free from  
Chips and Dirt; with a Fragrancy in Suffumigations, like the  
*Unguis Oderatus.* ' . -i ‘ . s sis

There is another kind of *Bdellium,* which is of a black  
Colour, and dirty, in large Grains, made up into Masses: This  
is imported from *India.* There is also a dry, resinous, leaden-,  
colour’d Sort, which comes from *Petres,* and is next to the best  
-inEfficacy. -. . *.tat ’ AuriJ '..‘sc.sc* ' I

It is adulterated with a Mixture of Gum; but what is thus'  
vitiated has not that Bitterness of Taste, nor Fragrancy in Sub.  
fumigations; which belongs to the pure and gennine.

It is of a heating, mollifying Virtue, discusses Hardnesses,  
.Tumors about the Throat, and an Hydrocele, if it be diluted  
with fasting Spittle. Used in a Pessary, or by way of Suffumi-.  
gation, it relaxes the Vesseis of the Uterus, and brings away  
the Birth, and all manner of Humidities. Being drank, it  
breaks the Stone, and provokes Urine: It is given with Success  
in a Cough, and to those who are bitten, by venomous Crea-  
turcs. It is good also in Ruptures, Convulsions, Pleurisies, and-  
erratic Flatulencies ; and is an Ingredient in Malagmas that are  
composed against Hardnesses, and \_ Nodosities of the Nerves:  
They bmise it, and work it up with Wine, or warm Water.  
*Diofiarides, Lib.* I. Cap. 8o.

The *Arabians* call *Bdellium Mabel,* mot- *jldelechil,* as.the  
Translator of *Serapion,* whom all follow, reads its Every one  
knows,, that it is a sweet-fcented Gum of an *Arabian* or *Indian*Tree. The *Arabians* had another *Mockel,* which was the Fruit  
of a kind of Palm-tree. *Scrapie* treats of both sorts in two  
diftindt Chapters... *Avicenna* comprehends them both in oneChapter,.the’ they agree in nothing but the Name; but for

Distinction-sake they call’d one *the Aiokel of Mecca,* andthe  
other *the Mockel. of Judea. - , . i-*

*Brastavolus,* whom almost all follow, is mistaken when he  
writes, that the *Bdellium* os the Antients was divided by *Avi-  
cenna* into the *Judean* and *Arabian* ; for *Avicenna* distinguishes  
*the Judean Bdellium,* which is a Gum, from the *Moccan,*which is the Fruitof a Tree; but he makes two Kinds of the  
*San Bdellium,* the *Sclavian* and the *Arabian* therefore the  
let of *Judean* common to both sorts of Gums, in  
order to distinguish them from the Fruit of that Name. Thus,  
many *Indian* and *Arabian* Simples were, by the Antients, called  
*Syrian* ; because they were exported out of *Arabia and. India*into *Syria. Aeiarcellus Empiricus* says, of the exotio and aro-  
matic Simples used in Medicine,

*AddeetAromaticde Species,quas'mittit Eous, . ‘*

*Vel quae Judaicis fragrant bene condita Capses.*

“ Add aromatic Simples sent . from the *East,* or such as pre-  
ferve their Fragrancy in *Judean* Boxes: ” *Judean,* that is,  
*Syrian,* for, in. the *Greek.* Geographers also. Χυεία Πανοαστίιη  
*{Syria Palaestina)* means *Judea.* The fame Species were call’d  
*Indian, from* the Place where they grow ; and *Syrian or Ju-  
dean* from the Markets .or Shops where they ,were fold ; so  
that the *Judean Bdellium* was .the same with the *Syrian,* of  
which there were, two Kinds, the *Indian* and *Arabian.* How-  
ever, *Avieerma* seem? to be of Opinions that the *Judean Bdel-  
lium* was different from *slum Arabian* and *Sclavian* ; for she writes,  
that there was the *Splavian Bdellium,* and the *Anabian,* besides  
*the Judean.* By a like Mistake, *Diasccrides* made the *Syrian*-Nard, which is the fame with the *Indian,* a different Thing.  
He seems also to .make three Kinds of *Bdellium,* and his Ac-  
count of them is pretty eonfufed. Hoseys it is. the Tear of a  
*Saracenian* Tree, that is, an *Arabian* Tree, pellucid, and like  
the Colour of Bull’s-gluei - He then adds, that there was a  
dirty and black Kind, made up in Lumps, which was brought  
from *IrAia.* Lastly, he subjoins, that there was a dry, resinous,,  
blackish [ὑποοτέλιον] Sort brought from *Petra.* Perhaps, by the  
*Judean, Apicenna* meant the *Petraean,* as *Psmy* sometimes ren-  
ders Πἐτραῖον by *Judaeum,* and mentions *Petraea Jndaea*; and  
*Stephanus* makes *Petra,* which gave Name to *Arabia Petraea, a  
CAn of sus Third Palaestina,* which, it is certain, was *Jndaea.  
Avicenna,* in another Place, mentions a *Bdellium* of an Ash-  
colour, which may probably be the same with the *Petraean* of  
*Diofcorides,* which he calls ὑποπέλιον, *hypepelium* ; for the *In-  
dian* is black, but *slum Arabian* of the Colour of a Man’s Nall,  
or like transparent Wax. . ,

; All the *Greek* Authors, since *Diofcorides,* knew no more  
than two Kincis of *Bdellium,* which are, as they call them, the’  
Σκυθικὸν καὶ Αροβιμόν, *cc the Scythian pris Arabian gr\** so fays  
*Galen, Aetius, P. Asgineta,* and others. As to the *Scythiam*they give the very same Account of it, which *Diofcorides* does  
of the *Indian ., so* that it is plain, that their Χκυόικὸν was the  
fame with. *Diascoriders* Ίνδικον. - ΒγΧκυθιιοῦν, must be under-'  
stood what, is brought out of *Indo-seythia,* or *Southern Scythia,*at the Mouth of the *Indus,* dine Author of the *Pcriplus* writes,  
that *Bdellium* is .brought from those Parts.

Since *Avicenna* and *Serapis* make a Difference hetween the  
*Bdellium Judaicum* (of which one Sort is the *Aratiarsc* and the .  
*Bdellium Meccense,* which they will have to be the Fruit of a  
Tree, and as every one knows, that *Mecca is Arabia-,* it  
apoears, that there are two Kinds of *Arabian Bdellium,* one a  
Gum, and the other the Emit of a Tree. And *Anicema* him--  
self, in. the same: Chapter, takes Notioe also of a *Bdellium  
Meccense,* which was the saine with the *Judaicum,* and was  
not the Fruit of a Tree; and this probably was the fame as  
that which *'Diofcorides* says was'brought from *Petra*.; for it is  
the general Opinion, that the modern *Mecca* was the *Petra* of  
the Antionts. It was formerly a very noted Emporium for in-  
*dian* and *Arabian* Commodities, which were brought- thither  
from *Albus Vicus,* a Port of the *Anabian* Gulphi . A nil perhaps  
the *Indian Bdellium* was the same as that which *Dsosearides bnssi*came from *Petra*at least, it is certain, that the *Greeks,* who  
follow’d *Dioseorides^* understood him in thatSeofe, making only  
two Kinds of *Bdellium,* the *Arabian,* and the *Indian,* which  
they call the *Scythian.* The first, then, in Goodness, was- the  
*Arabian*; and Of an inferior Sort was the *Indian,* which was  
brought from *Petra,* an Emporium os *Anabia.* However, I  
cannot deny but the Words of *Diofcorides* may be understood  
of three Kinin of *Bdellium. Pliny* reckons more, as rhe *Baby.  
Ionian,* the *Median,* and the *Bactrian. \_*

As to the Word βδέλλιον. *Bdellium,* it comes from the *He-  
brew* ohna *Bedelach*; for βδςλλιον is the Diminutive, hut  
βδέλλα the Primitive. *Damocrates,* in the Author of the *Pe~  
riplas,* calls it βδέλλην. *Marcellus Empiricus,  
. - —.—Creem atque Bedeliam.*

. I am not ignorant, that most of the *Jewise* Interpreters ex-  
pound the *Arabian Bedelach* by a Pearl; but some of the Antients  
understood by it a Spice, and the Matter itself plainly fpeaks iu  
For of this *Bedelach* the *Greeks* coin’d their μεδαλκὴς, or μαδαλ.  
χὴς, to *silumisuBdellium,* sor μ and st are often chang’d for one

’another.' Nor is it to'he wonder’d, that two Words of disser-  
ent Sounds, but signifying the same Thing, should have the  
same Original, aS that βΛέλλα κηὑ μεδαλχός should both come  
from *Bedolach.* For, after the same manner, out Of one *He.,  
brew* Word rTlbnN *Ahaloth,* some made ἀγάλλαχον ( *Agasu  
lochursil ,* others from the same Word, Contracted into *Aloth,*made ἄλόη *(Alce).* The Country of *Havilach* ΠλΊΠ, or *Cba-  
vila. Genesis* 2. II. where the *Bedolach* grows, may aS well he  
'taken for *India* as *Arakia.* All the Characters there given  
belong also to *India* ; for *India* too exports Gold and the Onyx-  
stone. There is frequent Mention made of the ονὰχίνη λιθια in

' the Author of the *Periplus,* winch Stone is brought out of *-India.*The Ἐυιλἀιοι *(Euilaeisu* a People of *India,* are not far distant  
from this Country of *Havila* ; they are so call'd by *Epiphanias.*The antient *Pericgesis,* or *Itinerary,* of the World, takes Nor  
free os 'Ευιλίταε *(Euilita). India then* produces *Bdellium,  
sriRtsts,. Bedolach.* But the Characters belong to *Arabia* in a  
more eminent Degree; there are the People Χαυλοτας *(Chalum  
loice),* or the Χαυλοταῖοι *(Chaulotai),* of *Eratosthenes* ; there IS  
also the purest Gold. The finest *Bdellium* is that of *Arabia,*which is transparent, and of the Colour of Wax. " Bedella  
" is a Tree in *India* and *Arakia,* the Tear of which is best iH  
*An Arabia,* being light, fat, and like Wax throughout ; but the  
*" Indian* is dirty, black, and in bigger*' Lumpsst IJidorus.  
-Avicennasays the Arabian Bdellium* is red, of which the An-  
tients fay nothing; but perhaps he Only means a Wax-colour.  
Βδἐλλιον τὸ Ἀραβικὸν διαυγές τε καὶ ,ξανθόν. μ The *Arabian  
-“"Bdellium* is transparent and yellow." *Artius, Lib.* 3.

- From what has heen said,'it appears, that the *Bdellium* of the  
Antients was that fort of Guth which the *Portuguese* now call  
*Gum Anime-.* It is the Tear of a Tree, whitish, resinous, trans-  
parent, inclining to the Colour of Frankincense, which,  
broken, appears of a Wax-colour, in Grains like Frankincense,  
hut bigger : The Oriental, or *Indian,* is ἀδραβωλον *(Hadrobd-  
lumsc* in great Lumps. *Salmasius de Homonym. List. la trie.  
'Capriati.*- it. - - : ' - 7\* . : ....: -. . . ;

00 This, is. a Gum of a reddish-brown Colour, deeper than  
Myrrh,-and of *a* tougher and more tenacious Consistence; and '  
is difficultly dissolved in-any Liquor, coming- nearest' to Myrrh  
in Scent, hut not so pleasant; of- a bitterish hot Tastes- Whet  
Comes from/;*Lurby* and-*Lndia, i3* by much the heft. There

' IS another Sort, which comes from *Gurney,* that is whiter, in  
large round-Drops, of little Scent; but tins is less esteem'd  
:We are\*quite Strangers to the Tree which produces this Gum.  
The- best Accounts which we have, is, that inis a thorny Tree,  
.with Leaves line those of che Oak. - - .-.S. ’ - s t

' ψ This Gum is of an heatingond drying Nature, helpfulagainst  
-Coughs and Impostuinations of the Lungs, vproVokes Urine and  
**the** Catamenia, expels the Birth and After-birth.. Outwardly it  
‘ is used in dissolving and discussing Plaisters. *Miller’s Boi.  
oflse -susmsc* -yssfe" Y E-E^ - ‘Τ

*. t Geossfroy* says, that both Sorts undoubtedly come from *Abyse  
sinlae. :* ..j ....μ . t . i L-) '/ ὐ

Some esteem the *Bdellium* os the Antients to he the *Gum  
'Anime* of the Moderns. - ' ; - ' ' ώ -si : ' - - - -

*Pliny, Hi N.* Z. 12. *c.* 9. says, that this Tree is prickly,  
black, and as high as the Olive-tree; and that. it bears Leaves  
which are evergreen, and Very like those of'the Oak.- The  
. hest Sortof this Gum is pure, yellowish, of aIbitterTaste, and

-Very agreeable Smell; it is transparent when broken. It is sat,  
combustible, soon catches-Fire, and is easily melted. That which  
is black and impure is good for nothing; *See Juki Jac. Wecker.  
Antid. Spec. L.* I. *Sect.* I7. *Galen* gives it the Epithets *Ara.,  
hian* and *Scythian , Pliny* that *css-Bactrian, L.* 6. C. 16. *et L.*

*C. Celsus* also, *L. I.-Co An* -gives it the Epithet- *Bactrian,*either from the Country *-6s Bactria,* or from the River *Ba.,  
ctgrtum,* not far from *Judea:* Some are of Opinion, that *Bdel-  
lium* and *MyrrhAXQ.* produced by one and the same Tree, and

- that there is no.Difference between these two Drugs. *Monardes*. is os Opinion, that it is the true *Anime. See Maethiol. Comment.*

*in L.* **I.** *Diofcor. C. yQ. Ruel. Li* **I.** *C. esosu Ql. Worm. Mu-  
seum,* **.6. 2. Ca I5. et 23.-** *fob. Dan.MyliiAniidotar. Mede  
Chymic. reform.-L. .2. Co Georg, d Tucre de Hist. Plant.*

*L.* **I.** *C.* **8I.** *Paul. Amman. Manuduct. adMatcr. Med.p.* **i28.**

*. Bdellium* is. of a hot, comforting, sweetening, absorbent, dis-  
cussing, and opening-Nature; When used internally, it cleanses  
the Breast Of acrid Matter, allays Coughs, purges the Kidneys,  
and cleanses Ulcers of the Lungs, provokes Urine, and expels  
.the Stone and Gravel, *Galen. S.* 6. *de Simpl. Med. sue.* stops the  
immoderate Flux of the Menses and the Hemorrhoids, tho' 'tis  
very rarely used internally. Externally, it softens, discusses,  
and maturates all Rinds of Swellings and . Apostems, cures  
recent Wounds, and injured Arteries. In the Shops it is made  
an Ingredient in many softening and discussing Plaisters and  
Ointments : It is also in the *Mithridate,* the *Emplast. de Me..  
lilot. Mrs. EmpEApostolicon, Nicci. Alexandria. Empiasi. Coro-  
neum, - NicoL. Empl. Stictic Croll. Emplast. Diaphoret. Myns.*the *Ccraturn Ammoniacwn Forest,* the *Ccratum Matricale, or  
De Galbano August.* the *Unguent. Apostolorum Auiccrm. Barthol.  
Zoiri Botanolog.* -t ... ......

BDELLOS, βδάλλος. The Smell of a Lamp just extin-  
guish'd. It signifies also a Discharge of Wind by tho Antis.  
Hence, \* - -

BDELYGMIA,. Ἐδελυγμιη, or βδελυγμία, or βδελυρίη.  
A horrid, disagreeable, and fetid Smell, sufficient to induce a  
Nausea; os, as it is usually express'd, to turn the Stofnach\*  
such aS that of-some Ulcers, or Excrement. ;

BECABUNGA. A Name for the **ANAGALLIs** AQUA-  
TICA, Brook-lime, which see., -

BECHICA, Ἀηχικἀ, from βἢξ» a Cough: All Medicines  
which are design'd to relieve Coughs, are call'd by-this Names  
It is-particularly.appropriated .to several sorts of Trochos, to he  
found in the Compilers of Dispensatories, and signifies the fame  
as *Pectoral.*

**TROCHISCI BECHICI ALBI:** *The white Pectoral Lozenges.*

*srl* **C -. / ,αί** *c From, the. College. , \ - '''*

- Take Of sine Sugar, one Pound ; of white Sugar-candy,  
half a Pound ; of *Florentine OrtiCC-rOQs,* half an Ounce ;  
of Liquorice-root, six Drams ; of Starch, one Ounce and  
an half; and make them into small Lozenges, with a suf-  
ficient Quantity of the Mucilage- of Gum Tragacanth,  
. made in Rose-water.. On Occasion may be added Amber-'  
grise and Mnlk, sour Grains Of the first, and three Of the  
- latter. \* ' ' ’ . ' - - - . ι

r- ! . ἰ t’ ' so' . . .

Thefe are small the old *Dispensatories* in the fame manner,  
without Alteration. They are pretty much used for Coughs,  
and Defluxions of Rheum, 'Some add to them Ambergrish  
and Mush, which makes them serviceable to sweeten the  
Breath. - But they are of no great Efficacy to any Purpose, and  
may he taken at Pleasure. \ **5 - ' . ' \***

' - This is directed Very littie different in the *Edinburgh Disport. '  
iorsi - . - ' - -*

*White* **PECTORAL LOZENGES.**

FhowClulncy.'

Take os the Four greater cold Seeds, hush'd. Of each ones  
δ᾽ Ounce And an half; white Poppy-seeds, and Pine-nuts, of  
each one Dram; Orriee and Starch, in fine Powder, os  
each three Ounces; fine Sugar, seventeen Ounces : Beat  
. - she Seeds into a Paste ; then put to. in the Powders, and  
make all into a due Consistence, within Mucilage of Gum  
... Tragacanth and Rose-water, to cut out into Lozenges.

This is a much better Composition than that under the same  
Name' in the *College Dispensatory*; and if sweet Almonds were  
in the room, of the Pine-nuts, it would he yet inore grateful.  
This is from the *Pharmacapcea Regia* of *Lwels.cr,.* who like-  
wise makes a red Lozenge, by adding to this two Ounces of  
Bole; which, with the Whole, is Very good against the Heart-  
burn, find is the fame, if not a better Remedy, in that Case;  
than some which are frequentiy advertised in public Places  
with great Eneoimums. - ; . : ’ ' ; ' ’ ‘

*’ 1 ’ . . i. . ’ . . ’* **. " I .6 ’** *.c - ss - . ’ \** **.. . l '\***

**ἰ TROCHISCI BECHICI NIGRI :** *The black Pectoral Lozenges.*

*so \_ ... Fromihe College.*

Take of the Juice of Liquorice; and of white Sugar, of each  
ten Drams; of Guin Tragacanth, and sweet Almonds,  
blanch'd, of each six Drams ; and make them into Lo-  
zenges, with a sufficient Quantity of the Mucilage of  
- Quince-seeds, made with Rose-water, *S. A.*

In the *Augustan Dispensatory* this is clogg'd with many other  
Ingredients ; but the first of the College hath it exactly as here,  
and there ascribes it to *Rhaxes* for its Author. The *Augustan*Collection hath also many other Compositions of the same Form  
and Intention; but they have not Reputation enough to con-  
tinue them down to .the present Practice. Thefe are much  
: more -effectual than the former, to stop Coughs from tickling  
Rheums, but not quite so grateful to take. Some powder the  
-Tragacanth; but that is Very tiresome, and will not make up  
so smooth, as If it he gradually-open’d with Rose-water,  
enough to beat up with the Almonds into a Paste, and after\*  
wards with the other Ingredients.

The *Edinburgh Dispensatory* directs this different from the  
preceding.

. Take of the Juice of Liquorice, two Ounces; Balsam os  
*. T.olu,* and Storax Calamita, each a Dram ; white Sugar,  
. . half a Pound; Mucilage of Gum Dragon, made with  
Hyssop-water, such a Proportion as will, with the requi-  
site Art, make the Whole into Lozenges.

*Quincy* directs a Troche with the fame Tide, the Prepara-  
from of which is as follows:

Take of the Four greater cold Seeds, hulk'd, of each two  
- Ounces; white Poppy-seeds, one Ounce; pouf upon these.

in a Marble Mortar, a sufficient Quantity of Juice of\*Li-  
quorice, diluted to the Consistence of a Syrup with Rose-  
water; to make them into a soft Pulp ., whichsirive thro’  
a Sieve with more Pulp of Liquorice, four or five Ounces ;

' and to them pur strain’d Storax, one Ounce ; Powder of  
Orrice, three. Ounces; of Anise and Fennel-seeds, of each  
one Ounce ; sine Loaf-sugar, two Pounds and an half;  
and make all into a Pasic. ...

This is likewise from *Trurelser,* and greatly exceeds thet of  
**out** College. It is an excellent good Pectoral Lozenge, and  
.useful in all Coughs whatsoever, to be taken at Discretion,  
r BE CHION, a Name for the *Tofstlago,* Coltsfoot, because  
it has the Reputation of being good for Coughs.

BECIOIS, βηκόνις, or βιικοῦως, is explained by *Galen or&succ  
Juts,* Sheep. . ..... ...

BECUIBA 'NUX: ’ - ’.δ᾽

This Nut is as large as a Nutmeg, and of a brown Colour;  
It consists of an olly Kernel, inclosed in a woody brittle Husk:  
Α *Balsam* is drawn from it, very much esteemed in Rheumatic

; ..and Paralytic Cases. It is brought from *Brafil. Geoffroy.*

’ . BEDEGUA. Ainongst the *Arabians,* this was the Name  
sor a Species os Thistle. *Rail Hiest. Plants Bsancard lays it***bras thethPINA ALBA. - — . -**

BEDEGUAR. The spongy Excrescences of theEascr *Syl..  
vestris* are thus called by some Writers on the"*Materia Medicat*The Ashes of there, burnt, are said to he effectual in the Gravel  
and Dysury ; and to incline the Person, who lies upon them, to  
fleep. *Fail Hist. Plant. Dale.*

BEEN EL,, an evergreen Shrub,- which grows in *Malabur. '*. A Liniment, is prepared of the Root of this, boiled in Oil  
*of Sesamum,* which is said to . he good for Head-achs, and  
' effectual in removing inveterate Pains in the Limbs.

BEESHA, a Species of the *Bambu,* which grows in *Mala-  
bar.* A Decoolion of this is ufed in Obstructions of the Menses;  
as a!fo in Erosions of the Gums, andTooth-ach, byway of

' Gargarisin. - - .. "v. ’/ .. ' - ....

BEGMA, βίγμα, from βίεξ, a Cough, in *Hippocrates* sig-  
nifies both a Cough, and the Spit brought up by it.

- BEGUILE, a Fruit about the Size *of* an Apple; with a  
yough and knotty Rind, inclosing a Pulp like the Strawberry.

*-Fail Hist. Plants'-*

BEHEM. o

./ The Root *Behem,* as it .is delivered to us by the *Arabians,*has been the Occasion of ho small Mistake on' account of Its .  
Homonymy, or passing under the same Appellation with the j  
Hermodactyl. *Been* and *Ben are* erroneously made to be ho- ’  
anonymous with *tiieAalanus Myrepstca.* The Name of this  
Root in *Arabic .is Behem,* and *Albebem. ' The Greeks* pronounce  
it π»χῥα *(Eecbern),* because they express the *Arabic, be,* by  
00, as ταμαρχένδι for *Tatnarhendi.* Hence, in *Cbarito,* and  
other Physicians of later Ages, we read of the πεχέμ λευκὸν  
*zndigulgrr,se* the white and the red *Beseem,'* which must **the**understood of this *Arabian Behem,* which is of two Kinds,  
white and red. Therefore *Avicennd,* where he treats of them,  
expressas the Name, in the Title, in the DualNumher, *Behe-  
men,* and comprises them both under the following Description;  
that they are ligneous Pieces of dry’d Roots, shrunk and shri-  
veil’d up, and are of two Kinds, the white and the red. The  
later *Greeks* make allo two Kinds of *Hiermodactyls,* the white  
and the red; and, for the most part, they use the Term *Hiermo-  
dectyl* for *theArabian Bebern,* the’ what the *Anapiatts* call *Her-  
modactyl* be quite another Thing. *Myrepsas, in ine Antidote*διἀ μαργαβιὑ^Γ Cofqui, has. it thus, in the GfeofCopy, asjoiirh-  
sous assures us : Μπεέμ. ἀλβε ῥοὗμ-πιε τἀ έπιλεγομενα λιμαι Έρμο-  
δάκτυλα μακρα.. In the King’s Manusoript we found written,  
on that Place,. Ἀρμοδακτὑλκ λευκου καὶ . That antient Copy  
always reads Ἀρμοδἀκτυλςν for Ἀρμ.οδἀκτυλον. In an antient.  
*Gracs-Arabic* Lexicon,. we: read Μπουσαδοαν*'As* μἀκας τδ'Ερμο-  
*J'ddjuAer,* where μπουσταἰτανμ written for βουσαίδαν, which is the  
*Arabic Buzidan,* or *siumajdan*; and, as we are inform’d by  
*Avicenna,* a ligneous *Indian* Drug, indued with the same Vit-

. tues as both the Kinds.of She *Behem,.* This Wood, he fays,  
rises to be adulterated with another .Kind call’d *Alhaba Barbaric.*This is a Root brought out of *Africa,* which Country was call’d  
by *^Arabians Barbaria,* and is so named at this Day. *Avi~  
eema,* in the Chapter where he treats particularly of this *Chabe  
Alberbpri,* that is, *she Barbarian or African Chabe,* says, it .was  
something which was. like *Hirmodactyls',* brought *ftcatyAseica,*.and by which *Hirmodactyls* are adulterated.. So thet thehinzs-  
*dan* and the *Hirmodactyls* were both adulterated by this *African*Root *Chabe,* and the *Buzidan* bad the fame Virtues as the  
*Behem.* There was no great Difference,. then, between the  
*'Hirmodactyl* and the Roots of *Behem,* since one and the same  
Thing adulterates *Herrnndactyl* and *Buzidan,* which is like  
*Behem..* It is no Wonder then, that the later *Greeks* used **the**Name os *Hirmodactyl,* instead of *Behem.*

The *Arabic* Word for *Hiermodactyls* is *jflfurersgiam,* the Mean-  
ing of which we are to inquire into. *Surengian* is not properly  
the seme aS the-GniL Τρμοδἀιὓυλον’ but this latter js **the**

Flower of that.Plant which the *Arabians* call *Surengian.* 'For  
this we heve the Authority of *Avicenna,* who calls it *Afaba  
Hirmes,* thet is, the Fingers of *Mercury,* which plainly answers  
to the *Greek* Word Τρμοδάάτυλον. He fays it is the Flower of  
the *Surengian,* and has the fame Virtues ; therefore *she Hirmo-  
dactyl* is the Flower, and the *Surengian* .the Plant. The same  
Author lays, thet *sue.Surengian* is the Root of a Plant, which  
heats while and citron-colour’d Flowers.

*P. Aigineta* is the first of the *Greeks,* as far aS I know, **who**mentions Ερμοδαάτυλον, and only fays of it, that it was of pe-  
collar Efficacy in Pains of rhe Joints, while the Humour is  
afloat. By Ἀρμοδάκτυλον, he means that Kind of *Epherneron*which is not poisonous, of which *Dioscorides* also writes, that,  
it discusses Swellings; and **the** *Arabians* say, that it mitigates-  
the Pains of the Gout, if the Parts be anointed with it. Tbis  
is their white *Hirmodactyl,* which they also call *Surengian.* hut  
they bestow’d this Name on two Plants, and were deceived *by*the Homonymy.. One of them was a deadly Herb of *Celebes,  
of* the bulbous Kind, call’d by the *Greeks sumajgpe,* because it  
was so quickly mortal as to kill within a Day’s Space. Bur  
there was another Herb of that Name, which whs also call’d .  
she *Iris Syhestris,* which was not. at all hurtful : This, perhaps;'  
is what the *Greeks* also call’d Ἀρμοδἀκτυλον, for it had one long  
Root of the Thicknels of a Finger; for which Reason they  
seem to have call’d it Ἀρμᾶ δἀάτυλον, " the Finger os *Mfr-  
" curygr* which Name agrees better with the Root than the  
Flower. So *Afaba Sasua,* another Root, from its Colour and  
Shape resembling a Finger, is by the *Arabian/oM’d Yellow Fin- ’  
Sers.* It is certain, that the same Effecti are ascribed by *Paulus*to the *Hirmodactyl,* as are attributed hy *Avicenna to the  
Surengian* which is not poifonous, which are, that it is use-  
ful in Pains of the Joints, when the Humour is afloat.

. The *Greeks* then knew but one Kind of *Hiermodactyls,* which  
was the harmless *Epherncrou,* call’d ϊ&ς ἀγίια, "‘ the wild Iris i”  
and had a long Root of the Thickrrese and Likeness of a Finger,  
and on thatAccount deserved its Nante - hut the other round and  
bulbous-rootedFphesuroe had nothing to merit thatAppeliation j  
yet the *Arabians* call’d both thefe *Ephemera* by the Name of  
*Surengcan.* An antient *Anapiaen* Herbalist renders the τὸ Κολχι-  
κὸν of *Diofcrndes,* which is the deadly *Ephemerum,* by *Suren...  
giant* The other *Ephcrneron,* which immediately follows in  
*Diofceridur,* he makes to he another Species of *Surengian:* **So**they divided this Kind into , two Species, the white and the red ;  
the red was the *Calehian,* or noxious *Ephemeran,* which had the  
Barlt of its Root of a red Colour*Auicemna* culls it the black  
and red *Surengian,* and fays, it was poisonous - he so calls is,  
because its Emit was block,- inclining to red. *Dioscorides,*speaking of the *Colchian,* καρπὸν ἔχοντα πυῤῥὄν ἐν *τω stsuaxt,  
iiZior* φλοιὸν ἔχεσαν ἔγκιῤῥον, ‘ε having its Fruit black, in-  
‘‘ dining to red, and. the Bark of his Root of a red Colour."  
Thus it is read in a very good and antienfCopy ; and it isifim  
thur confirm’d by *Neophytus,* in the common Editions these  
Epithets are apply’d to the Root, not the Fruit; φλοιένΐχησαν  
ἔγκιῤῥον έντφ μέλαοι, " having a black Bark, inclining toted."  
Wherefore this is not properly the red Hermodactyl, for thet  
Name only belongs to the *Ephemeran* with a long Root os’the  
Thickness of a I1 inger. This is commonly call’d the white  
Herrnodaeryl, and is the oniy Plant on which *P. Aegrneta* be-  
stows the Name of Hennodaolyl. *Avicenna,* who says that- the  
*Digitus Mercurii* the Flower of the *Surengian,* is to be un-  
derstood of both Species ; and hence th e Inhabitants of *Barbary*or *Africa* call’d the Root of both *Ephemercms PiermodactyL* There  
is another Error in *Avicenna,* in makingthe *Surengian* theEoot  
of a Plant, thet bears a white and citron-coloumi Flower ; the  
both *Ephernerons* have a white Flower. He misunderstood the  
Words of *Diofcarides,* where, speaking of theCtioher» Species,  
he fays, ανιησιν ἄνθος λευκὀν, μμφιονκρόκου ἀνὕει,-μ it produces a  
" white Flower, resembling that rd Saffron.” He took them  
in a Sense .as if they had run thus, ἀνῥα λευκὸν, καὶ ὄμοιον κροκ,ι  
ανθει, “ a white. Flower, and like that of Sassron,” or of. a  
Saffron-colour ; but- the .Author intends-it of a Likeness in  
Shape, not in Colour: . The Flower; os the *DolchiajtAplsemeron*is shap’d like thatinf Saffron,- hut white. *Pliny* makes the  
Flower os the.other *Ephemeron* to he blue instead of white;- her  
must you think, thet he hed any Authority for what.he says.;  
The good. Man was imposed: upon byhis own,Ears,, which *ter*presented to him κυάνεον arhyr ί9ιτχιονεον, “ blue Flower,” for  
" Snow-white,” as he hearken’d to hisArnanueniis,,who Usually  
read to him. He has been mistaken in Hundreds of other. Places  
from the like Occasion. - - , u , u. i

f The Heth *Pentaphylliim wpe* also.call’d Τρμοδάάτυ4ςς.. The  
Author of‘the Synonyma of *Dioscorides,* Προφύταο ϊβεως ονυξ.  
οἱ δέ πτερὸν ιβεως, οι δὸ Έ^μοδάάτυλον, the Prophets cull *it*" the Claw of the Ibis, others the Wing of the Ibis, others  
**ε"** Hermodaciyl.” The spurious *Apuleius,* in bis Herbal, under  
the Chapter of *Pentaphyllum,* has.the fame Expressions in Latin ;  
*Propheta,* &c. They alsocast’d it ανθρωποχειρα, ς. Man’s-hand,”  
and Ἀρμου βοτἀνην., “'the Herb of *Mcrcury^1* as I found it in  
**.the** Lexicon of *Harpacration.* This also is good for Pains in the  
Joints, and for the Sciatica. And perhaps *Paulus* is to be ,un derr

stood asspeaking of this Hermodaolyl: That he did nof mean  
. the *Ephemeron* is-probable, becaufe he reckons it separately,  
and.also the *Colchian* Species *Serapion,* however, takes the  
ὑΕρμοδάνοτὐλον of *Paulus* for the other. *Ephemeron,* which is not  
the deadly Sort. To this they attribute a Virtue of curing  
rPains in the Joints, which must be understood of the barmiess  
*-Ephemeron,* not of the poisonous. For *Abia,* in this Author,  
gives bis Opinion, that the best of the two'Hermodactyls - was  
.that which bad the Outside, as well as Inside, of its Root of a  
-white Colour-; for the black and red were pernicious. He  
means the *Colchian,* of which he seems to make two Sorts, the  
black and the red, tho’ there be but one, which is of a black in-  
clining to red. *Abix, 'rn Serapion,* adds, that they are mistaken  
' -who think the *Lapias agrestis* is brought from *Africa;'so the*-Transistor renders it; but for *Lagia* we are certainly to read  
*; iabid,* which is the *Caaba* or *Chabe* of *Avicenna*; which, he rays,  
-is like the Hennodacts’l, and is used to adulterate it. The *Ara-  
bian* interpreters observe, that this *Chabe* is like a small Radish,  
ond is by some placed among the Species of Hermodacryis, and  
is also call’d by rhe *Arabians Buzcidan.* But these Plants differ  
-only as to their native Soil;. this latter is from *India,* the other  
from *Barbaria,* that is, *Africa.* The *Arabian Labia,* and the  
-Hermodacryl, or biack *Ephemeron,* are so nean akin in Shape and  
-Effects, that same have taken them for the same Plant i some  
also adulterated one Species with the other, thet is, the Hermo-  
daciyl with the *Labia. ‘ ’*

. - The *Arabians* attribute to this *Caaba* a Virtue os augmenting  
the Body in Bulk ; and the Women use it for that Purpose,  
and to give themselves a portly Figure. The *Behem* has the same  
Property, as *Avicenna* assures us : This is call’d by the later  
ι?ΓοςἐνἈρμοδάκ.τυλον. Whenever we meet with Hermodaciyl  
in these Authors simply mention’d, we are to understand it of  
the *Pentaphyllum,* or of one of the two Species of *Ephemeron;*but whenever we find in *Myrepsus* and. others ‘Ερμοδάάτυλος  
:λἱυκὸ.6 καὶ ερυθρὸς. " the white and red Hennodaolyl,” wh are  
to take them for the white and red *Behem. Myrepsus* common-  
ly mixes them with Cardiacs, for comforting the Heart, and  
strengthening a weak Body, and for curing the Palpitation of the  
Heart ; for which Purpose both Sorts of the *Ben* are endued  
with a singularVirtue, according *loAvicerna,* and other *Arabian*Authors. -

Since the red and white Herrnodaciyls are both Ingredients in  
the fame compound Medicine, that they cannot be the fame  
with the red and white Hermodachyl of the *Arabians,* may very  
well, he inferred from these last being accounted of different Pro-  
perties, so as to he unqualify’d for entering the fame Compo-  
sition , and the red Hermoda&yl, which is the Κολχικὸν. is ac-  
counted rank Poison both by *Greeks* and *Latins,* and has no  
Place in Medicine, except it he in the way of killing., upon  
which Accounttherefore it can have no Place at all in Medi-  
cine, which rather provides a Remedy against noxious things,  
than uses them as a Remedy. It is said, that a Decoction of  
the Leaves of Herrnodaciyls in Water, being drank, mitigates  
Pains in the joints, which must be understood of the white Her-  
mndaolyl *ot-Ephemeron,* which has no deleterious Quality.. In  
*Myrspsis* there is ΑηἈρτίδοτβς δι’'Ερμοδαντὑλου τοΓ the Gout in  
the beet and Joints, which can be understood of no other than  
ofthe Hermodactyl with the long Root. Therefore *Brajsavo-  
lus* is in an Error, when, following *Mofue,* he fays, that the  
round Herrnodaolyl is of more Efficacy towards thefe Inten-  
tions, for which he would have .them understood to be effectual,  
that is, for Affections of the Joints ., for the round Hermo-  
daily 1, which is the Colchian, dees not agree with the Joints,  
and cannot be taken inwardly for the Joints, without being  
pernicious: - By the round HermodadryI we are certainly to un-  
derstand the Colchian with the round and bulbous Root; for the  
other with the long Root may he called the ‘Ερμοδἀάτυλβν μακρὸν,  
". the long Hermodactyl.”

Upon .the Whole, the Hermodaolyls of the *Greeks* are differ-  
ent stem thofe of the *Arabians.* These call the Flower of the  
Herb *Surengian,* the Fingers of Mercury, by which Name they'  
mil both Species of *Ephemeron.* And the *Greeks* bestow the  
Name of Ἀρμοδάκτυλον λευκὸν καὶ ἐρυθρὸν, " the white and red  
" Herrnodadtyh” an what the *Arabians* call the white and red  
Behem. They also mil the *Buzidan* of the *Arabians,* which is  
like the white Behem, by the Name of Hermodaolyl. They  
will heve it to be a Species of Satyrion, and so *Serapion* expounds  
it. The vulgar Appellation for it is *Satyrium Bastlicum,* hut  
the Shops cell it *Palma Christi.* Very learned Physicians main-  
tain, thet the *Buzidan* of the *Arabians* is the same as *Avicenna’s*Citron-fingers. *Brasseavslus,* who is followed by *Puchstus,* says,’  
that *Avivenna* treated of the *Buzidan,* which he corruptly call’d  
*Bush eidam,* under the Tide of Citron-fingers. But there are  
two Chapters in *Avicenna* of the Buzidan, and the Citron-sin-  
' gers, and they are quite different things. This Author indeed  
uses to give the different Appellation of the same thing in distinct  
Chapters, but then he always gives Notice of it. The Citron-  
singers, or *Afaba fafro,* are soaped, as he says himself, sike the  
Palm-os-the Hand. -. He calls it *alcast,* which is the same as the  
*Hebrew* rp, *Chaph,* and properly signifies the Palm, or hollow

Part ofche Hand, from the Veth qua,, which is to bend or ins  
curvate. Hence *Cochleare* also comes to signify heth a concave  
Instrument, and the Sole of the Foot. An old *Carino-Arabic*Lexicon interprets it by *Pugillum,* and *Alata,* because it is  
given with the flat Hand ; whence comes *desialmare, Mfmajstscir,*" to strike with the fiat Hand.” This Root is commonly mi-  
led *Palma Chresti, from* the fame Likeness. *Avicenna* speaks of  
the Citron-singer as a common Root; spur the Buzidan, he  
says, is brought from *India.* The Citron-fingers shew this CO.  
lour by their Name ., but the Buzidan is white. *Serapion* fays it  
is like the white *Behem,* that it was also white itself, and an  
*Indian* Drug. Therefore the *Buzidan* can never seem to be the  
same with the Citron-singers. Nor is *Julius Sealiger* nearer,  
the Truth in faying, that it is the same with what the *French*Painters call Terramenta, which is the Curcuma (Turmeric)  
of the Shops, and therefore different from the Citron-singers.  
*Salmasc. de Homonym. Hyl. latrices. Cap.* I I 6.

The Sorts of *Behen* commonly known are the following :  
*Bchen album,* Geoff. Tractat. 286. *Behen album Rauwolstis*

J. Β. 3. 37. *Been alburn Rauwolsti, folia lapathi, store lutea,  
et radice langastexili,* Chab. 448. *Behmon alind,* Parle. Theat.  
I572. *Jaceo Syriaca spinofa, folio laciniato, store luteo,* Rau-  
wolf. Itin. Ed. Angl. 23I. *Jaceo Orientalis patula, carthami  
facie, stere luteo magno,* Tourn. Cor. 32. Raii Hisp 3. App.  
104, *Serratula'asemis capitula fquamasc luieo, ut et store,*C.B. Pin. 235: *Raphonticoidet lutea,foliis inferioribus dissectis,  
caeteris carehand,* Vaill. Mem. Acad. Scienc. Anno I7IS. I.  
224. WHITE BEAN OF THE ANTIENTS.

Authors distinguish two Sorts of *Been,* white and red, but  
heth are different from the *Arabian Ben,* which is'the *Glans  
Unguentaria, Ossee.*

White *Been* is a Root, which *Rauwolscus* found at the Foot  
of Mount *Libanus,* and which *Tour resort* brought from the  
*Lesser Afia.* The Plant to which it belongs is named *Jacea  
Orientalis, carthami sacie,* J, R. H. according to *Vaillant.* It  
is cordial, antispasirnedic, and good to kill Worms. *Geoff.*

*Behen alburn,* Ossie. Ger. 550. Emac. 679. Men Pin. I4.  
*Behen album Mmfpelianum et Officinarum,* Merc. Bot. I: 23.  
Phyt. Brit. I4. *Been album Officinarum,* J. B. 3. 356.  
*Lychnis fylvastris, quae Been album vulgo,* ,C. B. Pin. 205. Raii  
Hist. 2. 998. Synop. 3. 337., Tourn. Inst. 335. Elem. Bos.  
281. Buxb. 20I. Dill. Cat. Gissi IIo. Boerh. Ind. A. 2I4.  
*Lychnis splvestris perennis, quae Been astum vulgo.* Hist. Oxon,  
a. 535. *Papaver spumeum vulg.* Herm. Cat. Hort. Lugd.  
Bat. 387. *Papaver spumeum, five Ben alburn vulga.* Park.  
Theat. 263. *Muscipula pratenses vesicaria,* P'inp. Flor. Jen.  
I oo. SPATLINGEOPPY, or WHITE BEN.

This Plant has, a long, thick, whitish, wcody Root, not  
much branched, from which spring several smooth, weak Stalks,  
about two Feet high, with pretty large Joints, at each of which  
grow two Leaves opposite to each other, without Foot-stalks,  
two or three inches long, and about an Inch broad, sharp-  
pointed at the End, of a glaucous or bluish-green Colour,  
smooth, and without any indentures about the Edges. The  
Flowers grow on the Tops of long Foot-stalks, several toge-  
ther, of five small white Leaves apiece, standing in a loose,  
fwell’d, round Hush or Bladder, of a greenish-white Colour,  
with several sine darker Veins This incloses the roundish Ca-  
lyx, in which are contained small brown Seeds. This is an  
Herb, which is frequently to be met with in Meadows and  
Corn-fields, and flowers in Summer.

The Roots only are used, and, as to their Qualities, they  
are accounted Cordial, Cephalic, Alexipharmio, and a Pro-  
vocative to Venery. It is but seldom used, *lsclillati Bot. Off.*

*Behen subrum limonium et Behen rubrum,* Offic. - *Lima,  
nium.* Ger. 332. Emac, 4II. Raii Hist. I. 395. Synop. 3.  
20I. Chab. 508. *Limonium majus vulgatius.* Park. I234.  
*Limonium maritimum majus,* C. B. I92. Hist. Oxon. 3, 6oo.  
Boerh. Ind. A. 76. Tourn.Tnst. 34.2.. *Limonium majus mul-  
tis, aliis Behen rubrum,* J. Β. 3. 876. SEA-LAVENDER.  
*Dale.*

*' Red Been* is imported in round Slices. Some believe it be-  
longs to a Species of *Limonium,* or Sea-lavender but its Origin  
is not certainly known. It is supposed to have the same Vis-  
tues as the white Been of the Antients, and moreover to be  
astringent. *Geoof.*

The Root of rhefed Behen, or Sea-lavender, is pretty thick  
and long, and runs deep into the Earth, mostly single,, with se-  
veral Fibres at the End, of a brownish Colour on the Outside,  
and reddish within, from which arise many large, firm, thick,  
green leaves, growing on long, broadish Foot-staiks, roundish  
at the End, and something resembling rhe Leaves of the Lemon-  
tree, whence it takes its Name. The Stalks arise io he about  
a Foot high, bare of Leaves, divided towards the Top into sieve-  
mi Branches, on which grow long Spikes of small, purplish,  
red Flowers, of five Leaves each, growing somewhat like La-  
vender, in greenish Husks, each including one long Seed.

It grows every-where in the SaJr-rnarshes, as below *Green-  
h'ith,* and about *Gravesend,* in great Plenty ; and flowers in  
*July* and *August.*

The Root and Seed is restringens, binding, .and of Service in  
a Diarrhoea, Dysentery, against the too great Abundance of  
the-Menses, and the Fluor Albus.

Though neither this nor the Spatling Poppy can be certainly  
proved to he the true Behens of the ***Arabians,*** the Descriptions  
they give of them heing so lame and imperfect ; yet they are  
allowed by the best Authors to come near them in Virtue, and  
to be proper Succedanea for them. What the Druggists sell for  
the white ***Behen*** are whitish flender Roots, less than chose os  
wild Parsnip. What they call the Red, are round transverse  
Slices of a Root of a reddish-brown Colour, in Shape like Ja-  
lap ; but what either os them are, is herd to determine. They  
.are os Very littie Use now-a-days, being not put into .any Com-  
position os the Dispensatory c \* ***Miller's Bot. Osse***

BEID-EL-OSSAR, or BEID-eL-SSAR, an ***Egyptian***Plant described by ***Prosper Alpinus*** and ***Visiingius,*** which grows  
near ***Alexandria*** at a Plahe called ***Mattharia,*** upon a Branch of  
the ***Nile*** called ***Calig.*** This Plant abounds with a milky Juice,  
which flows from the Leaves when cut, and is used in prepare-  
ing Skins for Leather, in order to make the Hair strip off; for  
which Purpose the Skins are macerated in it. \* Is taken inter-  
nally, this Milk causes a violent, and sometimes-fatal Dysen-  
tery ; it is, however, used externally with very good Effect in  
the Itch, and cutaneous Foulnesses. - TheDeaves bruised, both  
raw, or boiled in Water, are apply'd successfully to cold Tumors,  
and Parts in Pain. . ~. .

The Fruit is inclosed in a Down or sort ofCotton, softer  
than Silk, which is used for making Beds, or Cushions; and  
for.Tinder.

Bees delight much in this Piant, and get from it excellent  
Honey. ' -

BELEM NITES, ***Lapis Lyncis. Belemnites,*** Offic. Geoff  
Praelecti 70. ***Lapis Lyncis,*** Schrod. 353. Gesm de Lap. ***Q2.  
Belemnites,*** Worm. 70. Charlt. Fossi 2o. Mer. Pin. 2I i.  
Aldrov. Mus. Metall. 6i8. Schw. 369.' ***Belemnites Lapis, seu  
Dactylus Idaeus,*** Boer. 476. De Laet. 150. ***Belemnites parvus,***Kentm-34. THUNDER-BOLTS.

- It is sometimes written Belenites.

. The ***Belemnites*** is a round oblong Stone, ending in an obtuse  
Point, sometimes of a white, sometimes of a gold, and .some-  
times of a dark Colour. Some of these Stones are solid, others  
hollow, and it is distinguished by Lines drawn from the Axis to  
the Circumference. It is commonly about an inch in Length  
and Thickness,, though some have been found as large as a  
Manis Arm, and in everyone os them there is a Fissure or She  
running through its whole Length. The Name ***Belemnites***comes from a ***Greek*** Word, which signifies the Point of an Ar-  
row ; ***Dactylus Idaus,*** from its resembling a Finger in Shape,  
and its heing sound in Mount ***Ida,*** in the Eland os ***Crete*** ; hut  
it is dug. dp likewise in the ***Alps,*** and many other Places of  
***France*** and ***Germany.*** It is without Ground taken for tho ***La-  
pis Lyncurius*** of the Antients, fince it is evident, thet by that  
Word ***Discor ides*** understood Amber, which he tells ns was hy  
some taken, to he the concreted and indurated Urine of the  
***Lynx.*** The ***Germans*** say, thet this Stone is good against the  
Night-mare, and the Stone in the Kidneys. It is given in  
Powder, from half a Dram to a Dram, in any convenient Li-  
quor- ***Geesseroy.***

- BELEMNOIDES, BELENOIDeS, or BELOIDeS  
PROCESSUS. A Name for the Processus Styloides. The  
Process also,, at the lower Part of the Ulna, from which some  
Ligaments arise, which connect this Bone to the Wrist, is cal-'  
led by these Names.

- BELESON. Balsam. ***Rulandus.***

-BELI ***seu Serif ole Bengalensium.*** The Name ***by*** which  
***Ju Bauhine*** calls the COVALAM, which see. st is a tall Fruit-  
true not unlike the Quince.

BeLILLA, ***sive Frutex Indicus baccis.ee, fructu oblongo pQly-  
fporrno. .*** An ***Indian*** Berry-bearing Shrub. A Decoction os the  
Root is successfully given for refrigerating the Liver, and purg-  
ing off pituitous Humours The same bruised with Water,  
make a good Embrocation for Pains in any Part os the Body;  
and. apply'd to the Eyes, remove Redness and Inflammations..  
The Root also digested and boil'd in Oil is successfully drank by  
Children for Pustules in their Mouths ; and a Decoction of the  
Bark in Oil serves for the fame good Purpose. The Vapour of  
the Decoction Os the Leaves eases external Pains. The Juices  
of the Leaves and FIuit put together into the Eyes, remove  
Specks and Films. ***RaiiHist. Plant. "".'so***

BELLADONNA. A Plant thus distinguished.

***Solanum lethale,*** Offic. Ger. 26g. Emac. 34Q. Rail Hist. I.  
679. Park. Theat. 346. Mer. Pin. 114. ***Solanum melanoce-  
rasus,*** C. B.' Bin. I 66. ***Solanum maniacum.*** Chain 523. ***So-  
lanum maniacum multis, sieu Belladonna,*** ju Β. 3. 6II. ***Sola-  
num furiosum, luride purpureo flore calathoide, Melanocera-  
sus,*** Pluk. Almag. 352. ***Solanum somniferum.*** Mere. Bot.  
Ii 7o- Phyt.Brit.Ii5.' ***Solano congener flore campanulato  
vulgatius, latioribus foliis.*** Hist. Oxon. 3. 532. ***Belladonna,***Clusi Pan. 5O4- Elem. Bot. 68. RaiiSynop. 3. 265. Dill.

**Cat. Giff. I43. *.Belladonna majoribus foliis, .et stocibati,***Tourn. Insta 77. Boeth. Ind. A. 2. 69. Rupp. Flor.Jch. arid..  
DEADLY NIGHTSHADE. ***Dale. .***

This is the largest of all the Nightshades, having many thick,  
long, spreading Roots, that shoot forth many tall, angular  
Stalks, to a Man’s Height, or more, beset with dull green  
Leaves, in Shape like common Nightshade, but. much larger.  
The Flowers are set on among the Leaves, growing singly on  
long Foot-stalks, and are large, hollow, and Bell-sashion’d,  
divided into fix Segments at the ends, of a dusky-brown  
greenish Colour on the Outside, and purplish within, which  
are succeeded by large, round, shining, black Berries aS big aS  
Cherries, set on 4 brownish Calyx, and containing a purplish  
juicy Pulp, os a nauseous sweet Taste, full of small flat Seeds.  
It grows in several Parts of ***England,*** but not very frequently.  
It is to be found in a Ditch at the End of ***Gosmell-street,*** in  
the Road to ***Jssengton ; in Cuckstone,*** near ***Rochester Jas.Kent,*** all  
she Yards and Backsides are over-run with it. ***Millen’s Bot. Off.***τ The Fruits of this Plant taken internally are Very dangerous,  
aS appears by several Histories which occur among Botanic  
Writers. The Painters in Miniature macerate it, and obtain **a**fine Green from it. The Leaves ***ris Belladonna*** are great Sweet-  
eners and Resolvents; they are applied to the Piles and Cancers.  
Seme boil them with Whey, or make use of their Juice. Mr.  
***Ray***confirms these Uses os it, especialsy in carcinomatous Ul-  
hers and Indurations of the Breasts. ***Martyn? s Tournefort.***

In the Month os ***August*** some Children of ***Grandvaux,*** a Vil-  
lage four Leagues from ***Paris,*** having got into an uncultivated  
Garden, they eat of the Fruit of deadly Nightshade, or ***Mela-  
nocerason.*** Some time after they had a Violent Fever,. with  
Convulsions, and terrible Palpitations at the Heart, they knew  
nobody about them, and intirely lost then Understanding. A  
little Boy of four Years of Age died the Day after. They found  
three Wounds in his Stomach, with the Berries os the Night-  
shade bruised, and the Seeds sticking in the Wounds ; ths  
Heart livid, and no Water in the .Pericardium. Mr. ***Boulduc***communicated this to the Academy. ***Hist, de st Acad. Roy. de  
Scienc. A.*** 1703.. . . ' . ' - .

Our own Country will furnish us with many Instances of **the**same Kind from eating by Mistake the Berries or .Leaves of this  
Plant. I know a Gentieman, who had a Tenant, and bin  
Wife, .his Father-in-law, and Children, driven out of their  
Senses for some time, by eating Herbs boiled with.Baqon in **the**Spring, amongst which were the young Shoots of the ***Belladonna.***A Hound also who eat the Broth hed the same rate, but they all  
recovered in a sew Days.

' The Plant takes the Name of ***Belladonna*** from the Use which  
the ***Italian*** Ladies apply it to; for os the Juice, or distil'd Wa-  
ter, they make a sort os Cosmetic, with which they wash their  
Faces, in order to take away a Too florin Colour.

Notwithstanding the deleterious Effects of this Plant, some  
have Ventured to give an Infusion os it in Wine, as a Remedy  
for a Dysentery. And others have given a very small Quantity  
of the juice boiled up with Sugar to a Syrup, as a Narcotic.  
But this Practice is rather empirical than rational, and, at best.  
Very hazardous. .'

As to the Cure os Disorder from taking this Plant, ***Gerarcl***relates a Story of three Children ***tctWisoich,*** in the Isle os ***Ely,***who eat of the Berries; two of these dy’d, and the third was -  
vomited plentifully, by drinking copioufly of Honey and Wa-  
ter, and recovered. -.

***Ray, sscsrD Hachstetterus,*** relates a History os a Mendicant  
Frier at ***Rome,*** who drank an Infusion os this Nightshade in  
Wine ; the Consequence os which was, that ho lost his Senses,  
but was brought to himself by drinking a Glass of Vinegar.

BELLARIA. Sweet Cakes, Tarts,. or any sort os Con-  
fectionary Ware used for Desserts.

BELLERIC.ss. An Epithet for a particular Species of My-  
rohalani. See MyRoBALANi.

BELVEDERE. The ***Italian*** Name for the ***Scoparia,***Busby, or Besom-toadflax.

BELLICULUS, or BELLIRICUS MARINUS. A Spe-  
cies os Shell-fish like the Periwinkle.

BELLIS MAJOR, Offic. J. B. 3. II4. Chain 362. Ger..  
509. Emac. 634. Schw. 28. Rail Hist. I. 35O. Synop. 9I-  
***Bellis major vulgaris five siylvestrio.*** Park. 528. ***Pellio solve-  
strti caule foliose major,*** C. B. 26I. ***Bellis polyclonos siylvestrio  
mayor, caule foliose.*** Hist. Oxon. 3. 28. ***Leucanthemum vulgare,***Elem. Bot. 393. Tourn. Inst. 492. Boerh. Ind. A. 1O7. Dill.  
Cat. 82. - ***JSellidicides vulgaris.*** Act. Reg. Par. An. I72O.  
28I. OX-EYE DAISY. ***Dales et'et sc***

' The Leaves of this Daisy are long and round at the End, ser-  
rated about the Edges, growing narrower towards the Root,  
and ending in long broad Foot-stalks : The Stalks use to ***hea-***Foot or more in Height, striated and cloathed with smaller and \*  
narrower Leaves, having large Flowers growing on them Top,  
composed os several broad white Petals, set about a broad yel-  
low Thrum, made up of a Number of hollow Flowers thrust  
close together. The Root is small, flender, and creeping. **It-**

jgrows in Pasture-gtounds, and in the Borders of Fields; and  
flowers in *June. \* . .*

The Flowers of this Daisy are chiefly ufed, and.commonly  
go under the Name of Ox.-eye; they-are of a ballainicNainre,  
and are- accounted; good. for all Disorders of the Breast and  
Lungs, as'Coughs, Shortness ofEreath, Pleurisy, Consum-  
ption, and Wasting of the Flesh. They arc helpful tgaimi  
inward" Bruifss; and Wounds, arid Ruptures, and are often put  
in Apozems and Decoctions sot the aforesaid Purposes. *Miller's*

BELLIS MINOR, *Symphytum minimum, Cinsalida minima,*Offic. *Bellissylvejleis minor,*GE: 26I. Acts Reg. Par. An.  
1720. 278. .Raii Hist. I. 349. siynop.\_9r. Tostrmi Inst.. 49 I;  
Elem. Bot. 392. Dill. Cat. "am. Boerh. Tub A. IoS. *Bellis  
minor silvestrisscmpkx* ,.Park 53I.- *Bellis.minor silvestris,* Ger.  
5Io. Emac.636. *Bellis minor fylvestrisspontanea,,].* Β.4. III.  
Chub. 36I. *Bellis minor pratenses seu vulgaris.* Hist. Oxon.

3. tat. COMMON DAISY. *Dale.* i Ysi -

dine Root of the common’Daisy is a thick Bunch ofFibres ;  
the'Leayes grow in a Circle close to the Ground,'.being thick,  
and fleshy, and.are long and narrow-at the Bottom, ending  
broad and round, not much bigger'than.aLSilverPenny, with  
very few-indentings about’thejodges: ’ The Flowers spring im-  
mediately from'the‘Roots, iipon slender Stalks, three, .or four.  
Inches high, bearing-one smallsingle Flower.at.theEnd, made of  
a'Border of white'Petaia, of Leaves, setaboutia yellow Thrum ς  
sometimes the Border is edg’d .with a reddish .Colour,, and red'  
underneath. The Seed is whitish. Sender, and flat. Daisics.grow  
evejy-where in .the Fields and Meadows, and flower in *April*and *May. ’* i." 'I

The Leaves, and. sometimes the Roots, are used, and are  
reckon’d among the traumatic and vulnerary Plants, being,  
used in Wound-drinks, and ate accounted good to. dissolve con-'  
gcal’d and coagulated Blood, to help the Pleurify andTeripneu-  
mony. .In the King’s-evil, -the. Decoction given inwardly,  
and a'Cataplasm os the Leaves applied outwardly, are esteem’d  
by. forne extraordinary .Remedies. *Millers. Bot. Oof*

Its Leaves are acrid, glutinous, and give hardly anyTinciure  
of red to the blue-Paper, which shews that its Salt is not .very  
different from that which is. natural in.the Earth,, .thet is,-com-  
posed of Sal Ammoniac,'Nitre,.and marine Salt, involved in a  
ireat deal of Sulphur and Earth, which thicken theSap.of the

)aisies, andtenderit viscous. This Plant, takeh.jn a.Beisanor-  
Extras, dissolves the Blood which is thickened fry too .cold an  
Air, as it oftesthappensin-Irifiarnmations of the Lungs ; it takes  
away Obstructions, facilitates the Circulation of the Blood, and.  
restores the Fibres to their natural Elasticity:; for whichReafon  
it is thought to be very .vulnerary. *Ruellius* affirms, thet a Ca-  
taplasin, made with Daffies and Mugwort, dissolves fcrophulous  
Tumors, and. those wherein there is an Inflammation, and  
gives Ease to those who are troubled with the Gout or Palsy..  
*jMartquis Tournofort.*

There are several other Plants which go by the Name of  
*Bellis.* Thus the *Aphyllantes Angulllara,* or *Globularia,* is  
call’d *Belles caerulea MonspeliaCa.* See **GLOBULARIA.**

BELLO CULUS. A Sort of precious Stone resembling an  
- Eye, and from hence supers! itiousiy stud to be good in Disorders  
thereof. -

BELLON. A Distemper verycommon in *Dersajhire,* and  
other Countries where they smelt Lead-.ore, to which Beasts,  
and even Poultry, as well as Men, are subject; and, for this  
Reason, a certain Space round the Smelting-houses is called  
*Bcilon-ground,.* where it is dangerous for any Animal to Teed.

- This Disorder is attended with Languors, Weakness, into-  
lerable Pains, and Sensation of Gripings in the Belly, and gene-  
rally Costiveness; and very frequently-proves fatal. -

The Method of Cure which has been sound most successful  
on this Distemper, is, , to give Cremor, or Crystals of Tartar,  
in final! Doses, and to repeat them frequently, for Example, two  
or three times a Day.

I must hot omit remarking, that I have twice met with Dis-  
orders much resembling this,-from the taking *Baccharum Sa-  
turni,* as a Remedy for the Fluor Albus ; for which-Reason I  
look upon it as a very dangerous Medicine.- See **PLUMBUM.**

. BELLONIA. This Plent was fo named by Father *Plumper,*in Honour of the famous *Petrus Eelloaius,* .who has left many  
valuable Tracts on Natural History.

The Characters are; r .

It hath a wheel-shap’d flower, consisting of one Leas, and  
divided at the Top into several Parts ; from whofe Cup arises  
thePointal, fix’d in the Middle-of the Flower like a Nail : The  
Flower-cup afterward becomes a bard oval pointed Emit, in  
which are contained many small Seeds.

We have but one Species of this Plant ; thet is, the *Bellsnia  
frutescens, folia melilsae aspero.* Plum. Nov: Gen. SHRUBBY  
BELLONIA, WITH A ROUGH BALM-LEAF.

There is no Medicinal Virtue attributed to this Plant, that  
I know of. *Millers Dictionary.*

BELMUSCUS. See **AEELMUSCUS.**

:BEL0NE, Βελονη. A Needle. . See AcUs.

STLONOlDES.ssSlonRELEsororDRs; τ '

- - BELOERE. "An' *Indian* evergreen Plant The ‘Leaves  
powder’d purge with too much Violence; .The Seeds bruis’d,  
andtakeh warm,' pinge 'inore moderately: *Plait Hiss .Plant.*

BELOS; Βέλοστ/ An Arrow,‘or-Dart. This V/orss only  
belongs to Medicine, as it is a Causeof Wounds. *sol '*

BELULCUM. From; Βέλος, ; an.' Arrow, hied iestes, to  
draw. An Instrument for the Extraction of Dbrtioof Arrows,  
os which -many are describ’d by chirutgical Writers.

AELUTTATSJAMPAC'AM; The’Name ofa very large  
Tree, which.grows in*Malabar. .... s , dur.,;.*

TheEoorbmis’d with, fresh Gingor, and ‘taken Internally,  
powerfullyexcites Sweat. The1Bark'also taken, or-powder’d,  
and jorinkled'on’f Wound made bv the Bite of a Serpent; cures  
it. ’Cataplasms are made of the Leaves, boil’d in new.Milk,  
with an Addition of Palm-oil; which; applied to the Top of  
the.Head, are said to-difeufs viscid.and pituitousHumo'urs -col-  
lectsd in -the-Brain,''to. attenuate Them; and to dischargethern.  
by the -Nose. Ά: Decoction of the Leaves, drank’, attenuates  
viscid Phlegm,--and; by this means, cures a Copgni 1 The  
Fruit, when fresh,, boil’d in Honey, loofen the jBessy ; but,  
when dry, are astringent. Trom these also an Oil is'express’s,  
which agreeably rernovesPains of the Limbs, if they'are anoint-  
ed with it. *"RaiL Hist. Plants*

' BELZOINUM, the seine as .BE'whoritUM; which see.

*.BEN.* **The BALanus** MYREpsiCA, which fee. See also  
**BEBEM.** X -'

EENATH. The *Arabic* 'Name for small Pustules, which  
rife in the Night after sweating. - '

BENEDICTUS,. Blessed: A pompous Epithet given to  
some Plants ; as the" Carduus Benedictis, - and *theHirbae Bener  
dicta,* which is the same as the *Cearyophyllata,* Avens.

'-It is also given to many Compositions. Thus the emetic  
Infusion of Crocus Metallorum is call’d' sometimes *Aqua Bene,  
dista* ; and, ninongst the Alchemists; the 'Philosophers.stone  
joes by'the same Name, as well as by that of *Lapis Benedictus s*But *Myastcht*.gives the Name of *Aqua Benedicta* to a Water  
dilhi’d from ‘the *Serpyllum. Bates* gives two Waters, each  
under the Name of *Aqua Benedicta,* the' first of whichionly dir- -  
sets *from* the *'Apud Caleis,* in the Proportion of the Water to  
the Lime. As thus : ' ' " ‘ .

Aqua **BENEDIcTA’BATEI.**

TakeQuickiliine,.one Pound.;, and pour.upon iteightRounds  
of boiling Water ; after some time settling, pourit offby  
Inclination, andsiltre for Use. , : '

, This stands .commended for an extraordinary Medicine in  
many Castes of Obstinacy.; and, if it be drank, three .or four  
Ounces, three or four times a Day, -is said toxure red pimpled  
Faces, Struams, .Dysenteries, the Fluor Albus, rheumatio Pains,  
and the.Diabetes.. It is certainly a powerful. Drier, .and very  
proper to ofe in DeeoAions of the Woods, and all ingredients of zthet Intention ; biit tho’'the making of it is esfy enough, yet,  
herein *London,* it may be. had at any time from the Sugar-baker’s, .  
by .the Name of Lime-water, as it happens to be wanted, be-  
cause they use it. ninch in refining .their Sugars. rTbisis also ’  
much prais’d for cleansing and drying up .old foul Ulcers, both  
Try its internal Use, iand washing them frequently with it.

ss ' Aqua **BRNEDIc.TA. COMFosITA** Βάτε!.. .

. Take of fresh Liquorice, an Ounce v Sassafras-bark, half an  
Ounce; ston’d Raisins, six Ounces ; Nutmegs, six Drams ;  
of the preceding *Aqua Bmedicta,* six Pints, infuse cold for  
two Days, and strain off the Liquor.

.The Virtues are the same as those of the *Aquia Benedicta* pre-  
ceding, but of more Efficacy in stome Cafes. ' ' .

**BENEDICTA LAXATIVA:** *The* Blessed Ldxative, *from rhe  
Callege:*

Take of choice Turpeth, ten Drams ; of Diagrydiurn, the  
Bark of Spurge-root prepar’d, and Hermodacryis, of each  
five Drams ; the Seeds of Anise and Fennel, of each half  
an Ounce; of Sal'Gem, one Ounces of clarify’d Honey,  
- three times, the Quantity of the rest, so as to rhiike into an

Electuary..’ ‘ ' ...... ^

This is originally'taken from *Nicolaus,* both by the College,  
into their first Dispenfatofy, and by the Augustan, with very  
little Variation; aud it hathfo continu’d down to. the present 1Reformation of - our College, who have now rejected many  
needless Spices and Carminatives, which'were eroiided into it  
under the Notion of Correctsrs,' here being a Sufficiency re-  
tain’d for fuch Purposes. *Tiaelser* fays, that some -have order’d  
double the Quantity of the Spurge-iroot; but'thinks, that, as it '  
stands here, itistnough; and that erventhat requires a due in c-  
paration, which is, her infusing it three Days in very sharp e-

gar, and then drying in It is, however, so wholly neglecled  
by the present Practice, that it is never made in the Shops.  
*Quincy's Dispensatory.*

BENEOLENTIA. Sweets, or fweet-sinelling Medicines.

. . BENGI-EIRL A Species of evergreen *Indian* Ricinus is  
thus call’d, which grows in *Malabar.*

The Leaves powder’d, and sprinkled upon Ulcers, destroy  
luxuriant and fungous Flesh; of the Leaves alfo, bmifed, and  
mix’d with Cows Dung, and sew’d together in a Bag, a very  
gond Topic is made for any Parts assessed with Convulsions.  
*Raii Hast. Plant.*

BENIGNUS. Mild, gentle. It is apply’d to Diseases  
which are not virulent, and to Medicines which operate gently.,,

BENINGANIO. A Fruit which grows in the Bay of St.  
*Augustine, of* the Size of a Lemon, red without, and which is  
Very grateful to the Stomach. *Raii Hist. Plant.*

BENZOINUM. , τ

*Benocoin, Benzoinum,* Offic. *Benzoin,* Comm. Plant. Usual.  
87. Park. Theas. I572. Boerh. ind. A. 2. 259. *Benzoin,  
Asa dulcis,* Mont. Εχοί. II. *Belsoainum Ojstciharum,* Jons.  
I)endr.’355. C. B. Pin. 503. Raii Hist. 2. I845. *Benjovinum,*Chain 74. *Benjoinurn, iujus arbor solia citri, J.* B. I. 328.  
*Arbor Benzoini Grirnrni,* Ephem. Germ. A. II. 376. s. 3I.  
*Arbor Benzoinisera,* Breyn. Prod. 2. I6. *Arbor Virginiana  
pifarninis folio baccata. Benzcinum redelens,* Pluk. Almag. 42.

- Phytog.Tab.I39. f.'3. & 4. *Arbor Virginiana, citrea vel limonia  
folia, Bonzainum fundens,* Hortus Amstel. I. r87.fr 97. *Bonsai*Garzne, CinsiExot. I;;. THE BENJAMIN-TREE. *Dales*

This is called *Asa dalcis, Asa odorata, Belzos, Benzsc,.  
Gummi Senzse, Bcnzoinurn,* and *Belzcinum.* It is a Gum of  
an agreeable and fragrant Smell, produced in the *East Indies*By a large and high Tree, which bears long Leaves, like those  
of the Citron and Lemon-tree, though somewhat smaller,  
and not so green ; they are also whitish on one Side. Thia  
Tree is called by *Herm. Flic. Grim, in Ephem. N. C. Dec. 2.*An I. *Obsc* I52. *Arbor Benzo ini.* By *Jac. Breynio in Pro-  
drom. Bentcainisera.* By *Garzia, Bensvifora* ; and by *Cha-  
braeus, Benivi Arbor.* Some take it for the *Cyrenaic Laserpicium,*or ferulacious Juice, formerly found very good in the Country  
of the *Cyrenians*; hence ’tis called *Liquor Sirenaicus,* or *Cy-  
renaicus. Jac. Bantius* fays, it is produced in great Plenty in  
*Zeilan, Sumatra, Siam, Cambodia, Java,* and *Malacca*but  
the best Sort comes from *Boninas* and *Bairos.* It is imported to  
us quite dry. Some write, that it is composed of several Pieces  
of different Colours. The best , is hard, stolid, shining and  
transparent, has white Spots in it, and is of an agreeable Fla-  
vour. It is by some called *Amygdaloidee,* on account of its  
white Spots, which resemble a blanch’d Almond. See *Ol.  
Worm. Must. C.* 34. *J eh. Dan. Haest. Pkarmac. Pare.* I. *L.* 6.  
*C.* 26O. *Erasen. Franciseus.* The Brown and Black, though  
of an agreeable Smell, are yet far from being fogood as the’  
other Sort, on account of some Impurities, with which they are  
mined. It is of a warming, drying, distrusting, dissolving, and  
purifying Nature; resists Putrefaction, is good against Disorders  
of the Breast and Lungs, and cures Oppression *of* the *Thorax.*It is very rarely used internally ; but yet the Flowers, the Ma-  
gistery and Tinolure prepared from it in the Apothecaries Shops,  
are of singular Service in Coughs, Oppressions of the Breast,  
Ulcers of the Lungs. In Obstructions of the Menses, the  
Flowers taken in a poach’d Egg are of singular Service. *Ama-.  
tus Lufstanus,* with these Flowers, and Flowers of Sulphur,  
happlly cured an inveterate Cough, *Cent.* 6. *Cur.* 9o. *Jo.  
Beguinus,* in his *Tyrocin. Chym. L.* 2. *C.* 28. asserts, that they  
are good for Asthmas, and all Disorders of the Lungs. The  
Commentator on the fame Chapter commends them in inve-  
terate Phthises, and Asthmas. *Fabr. Bartolet. L. 5. de Dyspn.  
C.* I. fays a great deal concerning it in Disorders of the Breast,  
and Defects in Respiration, and calls jt the Balsam os the  
Lungs. But *Marcus Banzer* endeavours to demonstrate the  
contrary, *Controverf. Madico-miseellan. Dec.* 4. *These* 7. and  
asserts, that, its Flowers are hurtful in a Phthisis, and other  
Disorders of the Lungs. The Flowers have a more disagree-  
able Taste than the Gum itself. Externally it is ofed in all  
fragrant Compositions ; for it proves cordial by its agreeable  
Smell, fortifies the Senses; by its Steam, dries up the cold  
Humours of the *Cerebellum,* dissipates Defluxions, and cures  
Tooth-achs. However, in burning the Benzoin, we ought to  
take particular Care not to swallow a great deal of the Smoke,  
because it not only affects very quickly the Cerebellum, but  
also acts with fuch Force upon the Breast and Lungs, that ’tis  
ready to destroy Respiration. There is also a Cosmetic Tin-  
ctsrc made of Benzoin, in this manner :

Take of Benzoin, and Storax Calamity, each an Ounce t  
After reducing them to a Powder, and putting them into  
a Phial, pour upon them four or fix Ounces of rectified  
Spirit of Wine; put it in a warm Place, and let it remain  
in it, shaking it now-and-then till thcTinctsre is e-x-rafted ;  
then filtrate it through Paper; put some of it into Rose-

water, .Water os. the Flowers of Beans, ’ or any such  
Water .. .

It suddenly tons the Water into which it is put to a  
milky Colour ; for which Reason ’tis called *Lac Virginis,* or  
Virgin-milk:. With this the Face is to he washed. It car-  
ries off all Spots, and renders the Skin white, olear and pure.  
It carries off Blotches contracted by the *Lues Venerea, P. Am-  
man. AAanuduct. ad Mater. Med. p.* I22. It also removes  
Tooth-achs, if applied on a little Cotton. See also *Collect.  
Chym. Leydense Ce* 94. and 05. and *Chem. Rational.* R T.  
*C.* I. *Artic.* IO. As also the *Dispensat. Brandenburg, p.* I7o.  
Its odoriferous Oil also purifies and heals the Skin, if minced in  
Spirit of Wine, or the White of an Egg, . *Barth. Zorn  
Botanolog. ’ \*

Benzoin is a resinous, inflammable Substance, sometimes of  
a reddish, sometimes of a pale Colour, and generally very foul.  
When it is cover’d with white Spots, it is mill’d *Benuiornum  
Amygdaloidei.* It is of an agreeable Taste, a little acrid, and is  
.much ofed in Perfumes. It is not certain, that this Juice was  
known to the Antients. It is brought from the *Philippine  
1 stands,* from *Siam* and *Sumatra. M. Grimm* has describ’d the  
Tree which produces it, and the Manner of preparing it, in  
the *Ephemerides Flatura Curiascrum, Ac. 1. Dec.* a. It is very  
proper in Asthmas, to attenuate the Phlegm which oppresses  
the Lungs, and in Ulcers of that Part . hot rhe Flowers of Ben-  
jamin are preferred for internal Use. *Geoffrey.*

It is the resinous Gum of a Tree which grows in *East-  
Indies-,* the best in *Siam,* taken from young Trees of five or  
*six Years* Growth, whose Bark they cut right down in several  
Pisces in the upper Part of the *Tree, from whence* this Gum  
flows out; which, at first, is soft and glutinous,'hardening in  
tone. The Tree bears large Citron-like Leaves, but of a paler  
Green, and whitish underneath: The Fruit is about the Big-  
nefs *of* a Nutmeg, somewhat sluttish, cover’d with a Bark like  
the outer Shell of a Walnut, but somewhat downy on the Out-'  
side. *Miller’s Bat. Oof.*

The Druggists generally keep two Kinds of Benzoin, that in  
Tears, as ’tis call’d, and another Sore The true Benzoin,  
which was imported into *France* by the People'in the Embassa-  
dor Of'Sinar’s Retioue, was, externally, of a yellowish-gold.  
Colour ; but white internally, with finall, clear, white and red  
Veins distributed thro’ it: ft was friable, and without any  
Taste, but of a very agreeable and highly aromatic Smell., It  
differ’d very much from that Benzoin in Tears which is com-  
monly sold, which is a clear and transparent Mass, of a reddish  
Colour, and mix’d with whitish Tears, resembling Almonds,  
for which Reason ’tis call’d *Asnygdaloide Benzoin.*

" This last-mention’d Species ought to be chosen with Quali-  
ties as much approaching to the former as possible ; and it ought,  
above all things, to be pure, and free from Dregs, a Property  
with which ’tis very rarely to he found.

The other Sort of Benzoin is the most common of all, and  
very often counterfeited by a Fusion *of* several Gums together.  
The best of this Kind is pure, of an agreeable Smell, very resin-  
ous, and intermix’d with a great many whitish Tears: That  
which is black, and without any Smell, is absolutely to be  
rejefted. *Savory.*

*Preparations of* **BeNzoiN,** *or* **BENJAMIN.**

**TINCTURE of BENJAMIN.**

Let Benjamin, which spontaneously flows from its Tree in  
Plenty, be ground to Powder, and boil’d in a Glass. Vest  
. - sei, with Spirit of Wine once rectified, without any far-  
ther Preparation ; and thus it resolves into a red and sweet-  
scented Liquor, which, being decanted clear, and more  
Spirit pour’d to the Remainder,, and hell’d therewith,  
nearly the whole Body of the Benjamin is thus dissolved,  
except a little shaggy Matter. But if the Alcohol were  
perfect, and hell’d in this manner with the Benjamin, the  
Tinolure hecomes the richer. They are both of them  
odoriferous, and of a warm, bitterish, and balsamic .  
Taste.

REMARKS.

Hence it appears, thet an unoluous Resin may be perfectiy and  
totally dissolved in Alcohol, fo as therewith to appear in the .  
Form of a considerably homogeneous and thin Liquor; a lit-  
tle whereof being pour’d to a large Proportion of Oil, the  
Mixture immediately turns white, opake, and milky, thence .  
call’d *Virgulfs Milk*; because, if the Face be wash’d there-  
with, it becomes rofy and soft, and cover’d with a thin  
shining Skin, if suffer’d to dry spontaneously.. This Mix-  
ture, therefore, is esteem’d an innocent Cofmetic ; and, when  
mix’d with Wash-balls, renders them of an agreeable Odour.  
This Resin of Benjamin is wonderfully volatile, with a small  
Degree of Hear, and spontaneously dissolves in Alcohol with-  
out Alcalr. *Boerbnavrs Chymistry.*

This is somewhat different from that quoted from *Zora.*

TT».e *rr. rr* V»

**δ᾽ T TINCTURE of 'BENJAMIN.** *Trion* **Qninefe**

Powder four Ounces of select Benjamin4.pnt It into a Mas.  
- .' si trass, arid add to it tartaria’d Spirit of Wine, One Pound.

: Fit **the** Matrass, to R.Cucurbit; lute the Joint, and.set h  
ined warm Sand .for three **or** four Days, rlow-and-then  
shaking.it about.: . In that' time there will he made a fine

. Tincture, winch decant, and keep son Used v. :. υ si  
.: This is good in Asthmas, and other. Distempers of the Lungs,  
given from twenty, to sixty or: seventy Drops, ' in any conVenient  
Vehicle. But it is most used externally, to smooth the Skim  
and take Spots off the Faced. One Dram Of it, put into four  
Ounces of clean Water, turns it white, and is hell’d *Virgin’s  
Millscsu*To.this.Tincture mayhe added,OfStorax; one.Ounce;  
and Balsam of *Peru,* one Dram; which will render not only the  
Scent more grateful, and make 2. deeper. Tinge in the Spirit,  
hut be also, better for inward Use. ςἐν' ci-. ,. s ἰ

These: three Tinctures only differ as to the Ingredients added  
Io.theSpirii, with the Benjamin. 0- - 7 ῖ .: ' .ς. v

. S **FLoREsBENzoINIr** *Flowers of Benjamin.*

' Put into a subliming Pot two or threeOunces of Benjamin,  
. in gross Powder ; set on its‘Coyer, withoutluting-; keep

it in the second Degree of Fire in fiand,, 0r immediately  
: over a'small Fine of Charcoal.'" The ‘Flowers, will, present-  
Iy hegin to rise into the Cover, which, once in an. Hour,  
or an Hour and an half, must he taken off, anff wiped out,  
upon 4. clean Sheet.: of Paper, with. a Ἔeather. There  
τ ' ought to he two Covers to one Bottom, in Readiness, that

one may he clapp'donas" soon as the other is off. When  
the Flowers begin to rise -yellow, take the melted Benja-  
. min out of thePot with a Spoon, and put inter it more  
f' powder’d Benjamin, as *At* the first ; and To proceed untst  
.... there are as many Flowers aS desired. "" 'ὐ ψ s *- is....*

*l* ...ced’ \*\* Ἀ’ . ; /Ἀ - ‘ ί ’’ - τι ’. v. -«am ε,ος’οὐρ

IIP this Operation Care must he taken, that the Fire be not  
too strong, because it will throw up some Oil, and discolour the  
Flowers. -These are a wonderful Pectoral, and particularly in  
Asthmas; shy they greatly attenuate, and open Viscous Obe  
structions, and cluanse the Bronchia. They are conVenient  
aimost in any Form, and give a Very gratefist Scent to any.  
Compositions. Their Dose is from three to ten Or twelve  
Grains...

. iner o: j;...:. *: so. ...... -s . . - -*

**OLEUMYSt SRIRiTUs BENzoiNI:** *Oiland Spirit of Ben. '.*

*... . ... .....suntfagis . - ‘ ’sisi* . 7

Take of the black melted BenJantitio-whseh remains after the  
. Sublimation of the-Flowers, one - Pound; put it into al  
. : Retort, . which pisceinilaSand-finnace I-coyer It'weU with'

. Sand, into on its Receiver,”’and make ra Fire ’-os'.the first  
Degree for one Hour ; then increase to the second, and  
. there will-comeiover.some Oil and Spirit, with some dis-

. coloured Flowers: Augment/the Fire to the tbird Degree,  
and at last to the fourth, till no Fumes appear, and-there

. will be a blackish Oil,, with an acid Spiritand the Neck  
. . . os the Retort will he fill’d with the discolour'd Flowers,  
which may he. taken out,: and -put upon a- Clean brown  
Paper, to suck up the Oil.

r These Flowers, tho' not so beautiful, areas good for **Use as**the former ; and tho' the Oil, Spirit, and Flowers, acquire for '  
the present an empyreumatical Scent, in six or eight Months-  
that will wear off, and they become very fragrant. τ - :'-::

*After* the same manner mayhe made the Oss, Spirit, and.  
Flowers, or Volatile Salt, of any Balsams; as that *css Tolu, Pertegi*and the like. The Spirit in diuretic, het not Very pleasant, by  
reason of its Empyreuma. . The Oil is accounted a good Vul-  
nerary^ both, in external andinternal Application ; and for in-  
ward Use, is two or three Ounces of it be put-into a Cucurbit,  
which is capable of holding a Gallon of Liquor, and to it five  
or six Pounds .of-Water are added, and the Wholes is set in a  
Sand-fiirnace, luting on its Head and Receiver, with a gradual  
Fire, till the Water is ready to .boil, the spirituous Part of the  
Oil will come over with the Water, of a fine Amber-colour,  
and a fragrant Scent; which is aff admirable internal Medicine,  
a powerfid Diuretic, and by some reckon'd a Specific against  
**the.** Stone and Gravel in the Kidneys and Bladder. Its Dose is  
from five to fifteen Drops, in a littie refin'd Sugar. *squinefoe  
Difpens.atorys . '* 1 S' I.’ *.z .. ~~.~*

. BER. - The Name of a Tree which grows in many Parts os  
the *East-lndees.* Itthears-a Fruit like the Jujeb. -' i

BERBELICE. A Name in *Nicolaus Myrepsus* for the  
*Tussilago,* Coltsfoot. - -tat. r .. ...

BERBER!, βερβερὶ, according- to *Athenaus,* the Name of  
the Shell in which Pearls are found.

BERBFRIS, *Oacyacantha Galen.* Ossic; *Bcrbario,* Park.  
Theat. 561. Mer. Pin. I5. Chain 50. *Bcrberis, velOxyacan-  
tha,* Ind. Med.. 2o. *Bcrberis Crefpinus* Mont. fnd. 38. Bor-

*sicris dumetorum,* C. T. Pin. 45Ἄ Rim Hist. 2. I6O5. Syoop. fe  
465. Tount. Inst.’ 6I4. Elem. Bot. 487. Boerh. Ind. A. 2.  
233. *Jons.* Dendr. 2I9. Dill. Cat. Gish 66. Buxb. 36. *Ber-  
iaris vulgo, quae et Oxyacanthapuiata,* J. B. i. 52. *Spina acsu  
'da, five Oxyacantha,* Ger. 1144- Emac. 1325. *Oapacaniha  
Galeni,* Merc, Bot. i. 56. Phyt. Brit. 86. THE PAR-  
TERRY, or PIPPERIDGe-BUSH.

' The Barberry Tree, or rather Bush, for it never grows to  
any great Bigness, has the outward Bark of a whitish or ash  
Colour, and under that another of a deep Yellow.: The  
Branches' are long andthrittle, full"ofdharp Thorns at the Set-  
Iing-on of the Leaves, which are os .a roundish or oval Form,  
neatly denticulated or notched about, the Edges, of.a sourish  
Taste. The Flowers grow among the Leaves, in long Bunches  
of'six Leaves apiece. Of a yellow Colour, which are iollow’d hy  
round cylindrical Berries of a. red Dolour,, and full Of a four  
Palp, each having two long hard Seeds included. Tiheygrow wild  
ini several Places, and are frequentiy planted m Gardens. They  
'flower in *April Ana May,* - and the Berries are ripe in *'September.*The inner Bark and the Refries, with the Seed., , are used.

The inner Bark is Opening andsattehuating, and is accounted  
4 Specific against the Yellow-janndide, .'taken either.In an Insus  
fion or Decoction. The Fruit -is Very cooling and;restringent,  
herd good to moisten the hdouth ,, and quench Thirst,‘in burning  
Fevers. ; The'Conserve is serviceable against all kind of-Loose-  
ness and Fluxes, and likewifeofUsein the Jaundiced si*,\sse.*

1 The Seed is likewise binding, herd, restringent, tho. *it* in hut  
seldomnsed. ‘ *sosasur.* μά-;.;τ

y. The only Officinal Preparation frhin .thin Tree 4s- the Conr  
serve of the Fruit, τ *Mellguls Bot. Osse* S Y ..... .Ἀπ ..ed  
silts Root is-yellow. Very bitter, and gives but a faint red  
Colour to the blue Paper : .The Juice gives it as .lively a Red as  
Alum. This Plant, being analysed, . yields a great deal os acid  
Liquor, a little urinous Spirit, and a good deal of Oil and Earth.  
The Fruit is chiefly in Use.; it allwages too great a Fermenta-  
tion of the Humours, ‘ especially when caused by Bile. *Tragus*affirms, that awine made of the Juice of its Berries will stop  
a Diarrhoea, Dysenterys and theWhites. The Infusion of them  
is given to drink. There is. a Confection, a Syrup, a Jelly,  
and 4 Rob, made os them, which , ase used in cooling Jalaps,  
*Simon Paulli* shews the Manner of making the essential Sals,  
which-he'calls the *Tartar of Barberries:*  - u

Take, says he, 'two’PonndS of th'ei Juice of *Earbcrries,* and  
two Ounces of. Lemon-juice jssevaporate themVery gently.

7 7 over the Fine, strain them, and fer them to crystallize in a  
' Cedar i These Crystals‘are Very eooimgs Y. Tss'.S.. .

’TH the HeatoflIrine,' and internal Inflammations,they dish  
solve Nitre in . the jniee os Barberries, to fnake.it crystallized  
The Bark'of the Root is astringent sand detersive. *Martynsu  
Tournofontetsufr .sisi ’ / \ sis'-.* . .:.S.

” BERDIRAMON. A Name in *Nicolaus Myrepsus* for the  
*far us, Draconiium majus, Bisiorta mayor, Dr Serpentaria mayor,*which are all the fame Plant, *'is*-'"ς’IT . ’ Τ

c BERE AS. *" Rulanaus* explains this by *Rotundum. ...... f*BEREDRLAS. The Name of an Ointment described by"  
*Artius, Tetrabib.* 4. *Serm. am C.* i I 3. .. .

' KEREN! SECUM, signifies *Artemisia,* Mugwort. *Cap  
stellus.* 'S ' " ''' . T. ί . - . ,Ἀ .

' BERENICIUM. A Species of Nitre in *Galen Actua-  
rius. i ' -*

; BERETINUS FRUCTUS. A Fruit sound in the *Maifer.  
ca lflands* by the Sailors, in Sir *Francis* Drahis Expedition,  
round the World. \ss . ' . . ,  
BERGAMOTe. A certain fragrant and; cordial Essence is  
call'd by this Name, as also *Essentia de Cedra.* It is extracted  
from a kind of Lemon in *Italy,* call'd *Bergarnote* 5 winch, they  
say, owes its Original to an *Italian,* who took a Fancy to graft  
a Branch ofa Lemon-tree upon the Stock of a *Bergarnote* Pear-  
tree, whence the Lemons produced from this Union participate  
of both the Nature of the Citron-tree and rhe Pear-tree. The  
Inventor kept this DifeoVery secret for a long time, and enrich'd  
himself byinT “' ’ ' κί .ά ‘ *. sis.sese .* 7

r To extract the *Essentia de Cedra,* they cut the yellow or ex- zternal' Rind of theDemon into.'small Bits, and immediately-;  
break them, one after another, by squeezing them into a Clash;  
Vessel,' in the same manner as you squeeze Orangenpeel, when,  
you.haVeJa mind to' perfume a Glass of Wine.. But Ibis Vestal,  
must have a narrow Mouth, so as not to admit more than the  
Ends of the two Fingers which squeeze the Rind ; and even.  
this Opening must he closed, aS much as possible, after the Ends  
of the Fingers are enter'd within it, with some wet Parchment,  
in order to prevent what we labour to obtain from evaporating. sIt is proper, that the Vessel should bebelry’d, and that its Cape- ,  
city below should be far more extensive then its Neck, that the;essential Part of the Rind, which was express’d by the Fingers,  
may have Space enough to disperse itself, and io circulate as it-  
comes off, and to resolve itself into a Liquor.. This Liquor is  
an .ethereal Oil very subfile and of a charming Smell; but.

there must he a vast Number of these little Bits of *Bergamcte*Lemon-peel cut up, in order to obtain a fired! Quantity of  
Essence. .' .. . . so. so- . ..

' The *Ejsentia de Cedray* being prepar’d without the Help os  
'Fire, in manner aforesaid, has a much more agreeable Smell,  
and participates of the Quality in a much greater Degree, than  
the Essence which might be pt framed from the Rind of the  
Bergarnote Lemon by a Separation, aster the manner os other  
‘Essences. ‘ so.s-s '\* '

: It is a Cardiac, Stomachic, Cephalic, and is dualrry’d to relist  
the Malignity of the Humours. The Dose is from one Drop  
to six. *Tstemery des Drogues:‘~‘ .. .:i..* . J- χ

BERIBERII. A kind of Palsy, common in some Parts of  
the *East-Indies.* The Name, in the Language of the Coin.  
try, signifies a Sheep, and was given by the Natives to this  
Distemper, as *Pontius* thinks, because the Patients, in throw-  
ing out their Knees, and lifting sip their Legs, seem to imitate  
Sheep in theirWaIk. It*is,* says he,I a kind-of Pally, or mister  
Trembling, in which there is a Depravation of the Motion and  
Sensation of 'the Hands, Feet, and. sometimes of the Body,  
accompanied with a Trembling.' - :Γ1οστ-- ;i - ἐν-

The principal Cause of thisDiforder is a srpst and viseous  
pituitous Humour, which, in the Night.seafon, especially in  
rainy Weather, which holds without Intermission from the Be.  
ginning of *-November* to the Beginning of *May,* falls upon the  
Nerves, while Persons, being fatigued with the Heat of the  
Day, throw aside their Cloaths, and lie without any Covering’;  
by which -means the phlegmatic Humour, which was before ge-  
nerated principally in the .Brain, very easily seizes upon ike  
Nerves ; *lot* the Nights in these Countries, compar’d with1 the  
hot Days, may he said to he cold, in this Cafe, the Joints are  
lengthen’d, the pituitous Matter insinuating itself hetween the  
Jainctiires, so as to relax the Nervts and Ligaments. Tho’ this  
Disease, for the most part, comes on gradually, and by flow  
Advances ; yet sometimes it seizes a Person on a sudden ἵ as  
when, after being fatigued with Heat,' he immediately taherfe  
very plentiful Draught of the Liquor of the *Indian* Palm-free.  
Thus we heve sometimes seen, in our owir Country, ’ in the  
Season of the Dog-days, when Persons here been heated with  
Running, 'of any other vehement Motion, that a Draught of  
Beer, sir Whey and Curds, greedily shallow’d, has thrown  
them into- the -utmost Danger os their Lives, and even proved  
fatal. , ’ v": . ’-I.--.-. ..... υ .........

. -To proceed, the Symptornsof this Disorder are manifest.to  
Sight; for there is a spontaneous loffitude*"hf* the whole Body5the Monson mid Sensation, especialry of the' Hands and Feet,  
are depraved; and the same Rind of throbbing Titillation is  
felt in them, as is felt in the Fingers andToof in a cold Coun-  
try, and in the Winter-season, Duly the Pain is . not so great.  
Sometimes theVoice is so obshuctiid; that the. Sick cun hardly,  
speak articulately; This happened to mysels-irnder this Disor-  
der ς soI. my Voice was stflovv for a whole'Month, that those  
who fat close to me could. scarcely understand whet I sards  
Besides these Symptoms, there sometimes haphen many others,-  
all which; however, seem to owe their Rise to Scold and teas-  
clous Humour ; but let it fuffice, That I have mention’d she  
principal.‘ ' ............ . ... .

. Let us now betake ourselves to the Cure, which is usually  
very tedious, because the cold and viseid Humour is not easily  
and 'quickly disoussed : However,- it is not mortal in its own  
Nature, except it falls upon the Muscles of-the Breast and'  
Thorax,-and so stops the Passage of theEreaffi and'Voiced.  
Above, all things, you must avoid, is by any Means possible.  
Confinement to your Bed; het bestir yourself, as much.'as.  
Strength will allow, either in'Walking dr Riding, or any  
other Kind, of vigorous Exercife t Running, indeed, is more  
than you can perform. Strong and smarting Frictions, are also,  
highly necessary, at which your *Bengal* Men-servants, and *Ma-  
lacca* Women, are very dexterous ; for our *Eurapian.Sovanis*are as much unaccustomed to this Exercise as toBathing, which  
is frequently used here. They prepare Fomentations and InV  
sessions of a noble Herb called *Lagondi,* which has a Leaf like  
*majPersaaria,*-and is of a sweet and aromatic Smell. ThisPlant,  
I-ain well assured,' nor only does the Service'όί Chamomile and  
Melilot, but excels them, at least, in my Quinlon, in its  
difeuffive and! resolving Virtues. The Hands arid Feet; are  
alfo to he anointed with the Oils of Cloves and Mace, .but  
mix’d with Oil of Roses. for they are fed caustic, anil very,  
cosily corrode the Skin, if ofed alone. Besides.these Medicines,  
we have a noble kind of *Naphta,*Brought from *Sumatra,* which  
lies over-against the Kingdom *A Jama,* and in Sight of. the  
same: This Drug the *Indians* call *Aiinjac Tanr.ah,* which sig-  
nifies the Oil of the Earth ; because it breaks out of the  
Earth in the fame manner as the *Naphta,* which we know,  
and call *Petroleum* ; or bursts out of the Rock, and runs into  
the subjacent Rivers. This Oil is fo highly valued by the Bar-  
barians, that the King of *Achin,* who is the most powerful  
Prince in thet Istand, has forbidden its Exportation under Pain  
of Death ; so thet the Inhabitants bring it off by Stealth from  
the Land, in the Dead of the Night, to ours, and the *Engiist*

Ships thet happen to he near their Shores. This Oil, rubbed on  
the Parts affectid, relieves the Panent in a miraculous manner.

-It is also of a strong;chut tiot is nauseous Smelt, i 6 - 7.

: But since this Disease belongs to the chronic Kind, no Me-  
dicines are fo effectirai against in as-Decoctions of the Root of  
.China, Sarsaparilla, and Lignum Guaiacum, which, by these  
gentle and friendly Heat, discuss thofecold and thick Humours,  
and evacuate them by .Sweat and .Urine. We must, however,  
now-and-then interpose some gentle Cathartic. The hest of  
.this Kind is what we here prepare of an Extracti of Aloes,  
mid whet is commonly called *Gusta Cambodia,* corruptly named  
by us*GattaGamlumi -c i. r. ' s . 's bn.*

Phlebotomy is;nor allowed inxhis Case; for it is not **a***Plethora,* but ia .Gacochynna,’ thatisin Fault; and.whe is so  
ignorant as.npo.to know, that the Blood is the Fountain of Heat,  
and,the Treasure of: Life? n. a: .-. *' ic-*

... TbeEeliques of this Disease are conveniently disoussed -by  
Venice Treacle, Mithridate,sefr. andby Sndorisics, Diuretics,  
andsuch Medicines as strengthen the Nerves. Seasonable Ex-  
erase will assist Nature to overcome theother troublesome At-  
tendants on this Disorder. *Bontius de /Acdicina Indarum.*

BERILLISTICA: A kind of pretended Magic Art,' erne  
ployed in observing preternatural Visions in Glass. Mirroirs,  
which are called BERILLL *Pulandur.' .* τ ί , ςί ‘

BERMUDIANA. This Plant takes its'Name .from the  
*Bermudas* Islands, from .whence ike Seeds of the,-first Species  
wire brought, *scfsu-...* εἴά’-ς ‘"ς ᾶ \* ζϊ'ῖτὅ.ῖ' -  
''The CbamolerAare ς ῖ *' T.*

' It hath llly Flowers,' composed of fix Petais, where Em-  
ralernenf hecomes ’a triangular Fruit, .which opens in three  
Parts,, anillis divided into theeeiCelis, whicti are filled with  
round Seeds! T : ς',; τί f ' *' se'l ' τε ’*

V-There"are'twh Species of this Plant. *Mailers Dict.*

“' BERNA, or BIRMINA: These *Rulandus* explains by *Vac  
Vitreatum,* a glazed Vestel, *st"...ill* . -i I/t

BERNARDIA. This was so named by the late\* *DssofVip.*

*liam Haastoun,. in Honour of Dr. Bernard de Jresseeu,* Demon-  
strator of Plants in the Royal Garden at Parisi' )"  
:“The Charactsrvare7 : - γ- y --- 3χ'"ξ.τ;~

It is Male and Female in different Plants; the Male Plants  
preduce small Katkins, whicti, when ripe, fall off; theTemale  
Plants heve a coccous petalous Flowers; which are succeeded by  
uicoccous Fruits, resembling thofe of the Ricinus.

τι There are foubSpecies of this Plant?\* '’ \*1 - -- " - ,

I know of no medicinal Virtues attributed to this Plant.

*Miller’s Dictionary. . \_r . ,*

BERRIONIS. Colophony, Gum Juniper, *or Vernine.*

*Rulandus.* .. ... ο

. BERS. A sort of Electirary which the *Egyptians* make stso  
of out of Gainry, in order to nine atemporary Delirium ; in'  
which they probably take the same monstrous. Satisfaction as  
the *Eurppoanssu* in getting drunk. The Compositionis, thus :

Take of white. Pepper, and ofthe Seeds of white Henbane,  
each twenty Drams; Opium, ten Drams; Indian Nard,  
Euphorbium, and Pellitory of Spain, each one Dram;

Y and Saffron, five Drams. Reduce all these ingredients to a  
sine Powder in a Marble Mortar, and make into an Elec-  
inaIya'with three Partsofpure Honey. \_ . . Sid

This Electuary is not to he used till it has stood six Months.  
It.seems to differ very little from the Philoniutn Romanum,, of  
whicti *Avicerma* has given us the.Receipt; and the *Egypciaus*find it from Experience to . he postefled.-of the same V irrues  
and Efficacy, *Prose. Alpin.* ’ i ....

' BERULA, Offic. Chiam. 539.. *Sium,* Rivin. Irr.. Pent.  
Dill. Cat. Gissi I4.ts *Siam erecfnm umbellatum,stvrAastinacde .  
aquatica.* Rail Hisp *I.* 444.; Murc. Bos. I. 69. PbyI. Brin-  
LI4.' *Ssum state Apium, falyestre, follis oblongis,* C."Β..-Pin.  
Isei.: Rail Sytiopr.I. 2II. Rupp. Flor.. Jen..a3o:cToum.  
Inst. 30S. Elem.; Rot. 25S, lloerh. Ind.. A. 55.. Birxb. 305.  
*Sim save Apfninfalastre,folisesobbmgis,sust.IJiadsu.* 29.3. *Siam,  
durbelliferorrs,* 1.Ἐ, g. I72. Chab. I73. *Slum medium,* Ejosd.  
I74. &J.B. I73. *Siutn minus alterum,* Parke Theat. I24I.  
*Sium majus atigastifolium.* Ger. Emac. 256. . *Sium erectum,.  
follis serratis,* D. Doody. *Flaseurtiurn aquaticum,* Ges. Icon.  
2oo. UPRIGHT WATER PARSNIP.

It grows for the most part in moist and wet Places, and  
flowers in the Month of *June.* Its Leaves are only now in Use.  
It is esteemed an Antiscorbutic, and like the *Siam,* Dr Water- .  
Parstiip, dissolves and evacuates the Stone, provokes Urine arlon,  
the Menses, expels the Foetus, and; if mined withEood, isof  
Service in the Cute of Dysenteries.. *Dale.*

BERYLLUS, Offic. Boet: 2I4. Calc. Must 22I. Mom.  
Exot. 2.4. De Laet. 44. Aldrov. Musi Metal. 952. Kenrm. :  
47. *Berillus seue Beryllus,* Charlu Foss. 4of THE BE-  
RYL. *Dale. , , /*

This is a precious shining and transparent Stone, the Colour  
of whicti is commonly a Sea-green; but there are some of the  
Colour of Os,orof Garlick, or Pale, or Yellow,or of the CD-

. lout os Goli *r* They call this *la& IChrysobcrillus*; that is to fay,  
gilded Bend. This Stone is found in the Mines in the *Indies,*in the Ifland of ΖρίένΛ.

It is good to stop Fluxes and Haemorrhages, being bruised  
and given inwardly; but in is seldom used in Medicine. *Le..  
Bury des Drogues. A.. - .. ....*

: BERYTION, Βηρήτιον.- .-The Name of a Collyrium de-  
scribed thy.Gefinz, and recommended by him for Instammatinns  
of the Eyes. It is also the Name of a Pastil, taken Notice..of  
by the feme Author, as good in-Dysenteries. O . E -

BES. .A Weight. It is Two Thirds osan-lnteger ; gene-  
Tally of a Pound. . Eight Ounces. . .- *A ...ssl .so.::.*

' BESACHAIL A Fungus, Or Sponge. *Rulaytdus. -i-*BESASA. - ςΒησασἄ. . The *Pacta Sylvestris,* wild. Rue. -

' .\* BESLERLA. This Plant was named after *Basilius Besicr,*an Apothecary at *Nuremberg,* who was the-Author, of a Book,  
intituled, *.Hortus Eystetensissi- ri:in .ils c* .c. ..S -

The Characters are; .-Act - . - \_

Isobath: aElower consisting of one Leaf, which is tubnlous,  
and of an anomalous or personated Figure; having two Lips :  
from whose Cup arises the Pointal, which is fixed like a Nail  
in the hinder Part of the Flower, which afterward - becomes a  
soft, fleshy, oual-shap'd Fruit, in which are many-small Seeds.

There are.four Species ofchis Plant. - -- st j - " ;

- ’ I know\_ ofno medicinal Virtues attributed to this Plant.  
*MillePs Dictionary.* ffa.c et''.'. . .l -:ι. i '.. . . ι .

BESONNiV *Rulandus .cxpisius* this by *Muscarum Fungus,*I suppose he means a Sponge, which is the Nidus os some Sort  
ofFlieS. ἄκ.ί ! ά.'νύίώ .; -s' testes

BeSSANEM. This, in *Avicenna,* signifies a Redness of  
the external Parts, resembling that which precedes the Le-  
prosy. It occupies the Face and Extremities.. - This should  
feem to be what we call Chilblains.- - - Ἀ .c ψ -  
'BESTIA. Any fort of Beast) a: si. l ‘

BESTO. A Name, in *Oribasius,* for the *Saxifraga,* Sa-

'. .BETA;: Beet. .A well-known Plant. -- . - . -Ἀ\*

There ure two Species θί Beets, of winch the black Beet, and  
especially its Root, boiled with Lentils, is a powerful Binder;  
hut the white Sort keeps the Belly in a right Temper; but  
both of them, are of bad Juice, on account of .their Nitrosity;  
by which..Quality, however, their Juice, with Honey, infused  
.into The Nostrils, purges theHead, and helps Pains in the  
. Ears, r The Decoction of theRoots and Leaves detergeth Scurf  
'2nd Nits, .and mitigates Chilblains, which arefomented there-  
with. ; ;The prude Leaves are applied by -way os Cataplasm to  
the Alphi, which ought first to be rubb’d' with Nitre; they  
also serve as a-Cataplafni for an Alopecia, alter- the Place has  
.been scrap’d, and Tor spreading Ulcers, ".Being boil'd, they  
.Cure-Eruptions of Pimples, (ἐξπὸήματαψ Burns, andEryfipelas.  
*Diofcorides, Lib.* 2. *Cap.* X49. ss ' sa. - . . -

There is another Sort of Beet -call'd *ISeea Sylvestres, or* the  
wild Beet; Of which *Diofcorides* treats under.the Appellation  
:of *Limonium. ... : ’ - dur.*

BETA ALBA, Offic. Ger. Emac. 318. Rail Hist. i. 204.  
*Beta,* Chain 302. *Beta alba velpalloscens, quest Sicula et Cicla  
Officinarum,* Hist. Oxon. Th 596/ Boerh. Ind. A. 2s94. *Beta  
communis allta,* Park. Parad. 48o. Ger.. *‘basts - Beta Candida,***J. st.** 2. 96I. *Beta alba vel pallescens, quaGiclaOssecirtartarr,***C.** P.II6. Tourn. insta 5O2. WHITE BEET? *Dale.*

The Root of this Plant is large and thick, growing deep in  
the Ground, shooting- out pretty large Leaves standing on long  
Foot-stalks, pretty broad, androundssh pointed, and somewhat  
. crumpled, of a flashy and insipid Taste. The Stalks are  
pretty thick and anginas, growing, to be two Foot high or  
more, branch'd and beset with the like Leaves, but smaller.  
The Finwers grow inCl inters, of a green. Colour, small and'  
chaflry.. The Seed is hard .and prickly. Thin is usually planted  
in Cardens; though we have a Species of Beet which grows  
wild in several Places by the Sea-side.'

Beets are more used as a Pot-herb, and-toeat with Salt-meat,  
than physically. They loosen the Belly, and attemperate hot  
choleric Humours. The Juice of the Roots is sometimes used  
as an Errhine, being snuff'd up the Nose to clear- the Head of  
Phlegm and mucous Humours, and by that means to help old  
Head-achS. ' ' ς .- :

The Beet is one of the Five emollient Herbs. *Mellpris  
Bor.Dffi . - - ’ ... so .si...:-.: . -*

BETA RUBRA, Offioi Ger. 251. Emac. 318. Raii Hist.  
I. 204. Chain 302. J; B. g. 96I. *Beta rubra vulgaris,***C.** B. I I8. Hist. Oxon. 2.. 596.- Tourn. Inst. 5o2. *Beta  
communis rubra.* Park. Parad. 489. RED BEET. *Dale.*

This grows in all respects like the former,, except that, it is  
somewhat less, and the Leaves strait; and the whole Plant,  
Stalk, Leaves, and especially the Root, is of a deep-red or  
purple Colour.. It grows with che former. Its- Virtues; and  
Uses the same. \*”t.

The Root is more frequentiy employ'd- to garnish Dishes,  
than to any InedicmalUseS. *Millers, Eat.Desse*

. BETTE, Offic. *Betle isme Betre,* Ger. Ϊ357. Einac. I54i.  
*:Petre, Betle, Betele,sive Betlile,* Park. Theat. I6I5. *Betrefive  
Tombul,* C. B. Pin. ψι o. Jons. Dendr.Tya. C. Com. Flo. Mal  
6O. *Betleside Betelle,* J. B. I. 437. Chab. 33. *Betele,* Bont.

- 9I. *-Peetla, Code,* Host. Mal. 7. 29. Tab. I5. *Piper longum,  
foliorum nervis decurrentibus tenuioribus et mollioribus, Betle  
dictum.* Hist. Oxon. 4. 603.. *Bulasowasla,* Herm. Musi Zeyl.  
34. BETLE. ; .. ' '

This -is a Plant of she scandent Kind, much celebrated in  
‘-the *East-Indies.-* The Leaves are principally in Use, which  
are esteemed best when fully ripe, and ..of a yellowish Colour ;  
- they-are spoiled hy heing much handled when they are newly  
'Pulled from the Plant. ‘  
...hr the *-Malacca* Islands, the *Betle* hears. a kind of Fruit  
wreathed in 'the Form of a Lizard's: Tail, which, the Inha-  
bitants of These Blands eat on Account of its agreeable- and  
grateful Tastei *Parttius* informs ns, that it bears a Fruit re-

- feinbling the; white oblong Pepper, or'rather the Tail of a  
Dormouse. This Fruit is, by the Inhabitants of *ffiC Malacca*IflandS, called. *Sirii Boa,*; and *sis* had in much higher Esteem  
chan the Leaves of *ffin Beples* It is planted like Vines, and  
"'Props and Supports are erected *for it* to Creep along. Some,  
'Tor The fake of greater Profit,1 inake'ir cling to the Trees  
\* which bear the Arcea, or *Indian* Nut, and thus form a bean-  
tififl Shade. It grows in all the Provinces of the *Indies* on the  
Sea Coasts, but not in midland Places, Or such as lie remote  
c from the Sea, unless it has been transplanted to them.

- Most of the antient Botanists confound the *Betle* with the  
. Malabathrum, or *Indian* Leas.; but they are quite different  
- Plants, since, according to Gin-rim.,, the latter is a strait Tree,  
.whereasthe former is of the scandent Kind, and stands in need  
rOf Supporters? ' s .\* ;

1" In the Morning, the Afternoon, the Evening, and the  
: Night-time, the *Indians* chew the *Brtie,* and carry it Conti-  
r finally about in then Hands; but they do not use it alone upon  
-account os its Bitterness, but wrap- up the *Indian* Nut, and a  
*-littie Lime,* in the Leaf of the *Betle,* which they affirm so be  
a Mixture of h very grateful Taste. Others mix *Lycium* with  
the *Betle.* The Rich and Opulent nse.it with Camphine of  
*' Borneo,* and some others with Aloes-wood, Muik, and Amber-  
arise. When thus prepar'd, it has so agreeable a Taste, and  
renders the Breath so sweet and fragrans, that the more wealthy

' of the Inhabitants-chew it, almost continually; and also others  
according to. their Circumstances'; tho'; some .chew the Arcea  
with Cinnamon or Cloves. These are the Circumstances, of  
which *Garcias,* gives us an Account; hut other Authors, who  
have travelled themfelves thro, the *Indies,* inform us, that both  
therich and poor *Indians* constantly chew the *Arcea esuns,*broken and wrapp'd up, with a littie Lime, in the Leaves of  
. the *Betle,* which sends forth so fragrant a Smell, aS to fill the  
whole Room. Upon spitting out the first Juice, which some re-  
tain, it appears bloody, which Colour it receives from the *Ar.,  
cea,* and not from the *Betle.* Then they take successively more

. Leaves, prepar'd in the same manner. Unless the *Indians*this Practice, their Breaths would have a disagreeable Smell.  
*Dontius* asserts, that the Leaves os .the *Betle,* us'd without the  
’above-mentioned Substances, which is frequently done, corrode  
the Teeth, and soinetimessmake them drop out. In the *Indies  
1* thyself have known young Men, not exceeding twenty-five  
Years of Age,' entirely deprivedos their Teeth, by a frequent  
Use os the Leaves of the *Betle. "* l .

\_ When, they take their Leave of any one, 'tis customary to  
make him a Present of a silken Purse full of those Leaves thus  
prepar'd ; and no one allows his Friend to part from him with-  
out a *Betle,* which, with them, is the Sign ed taking Leave.  
: -When they make their Addresses to the Great and Opulent,  
they nse to' chew the *Betle,* in order to give them an agreeable  
Breath ; for, with them, Iiot to heve a perfum'd Breath, is an  
unpardonable Transgression of the . Laws of Decorum and good  
Manners ; and when People of a low Condition are oblig’d to  
converse'witlr the Great' and Opulent, they put their Hands  
**on** their Mouths, lest, perhaps, a Gust os their disagreeable  
Breath-should prove' offensive to the Nostrils of their Betters.  
When, their Women .have Bufiness of a certain kind to transact  
with Men,, they chew the *Betle* previousty, imagining that iris  
in Incitement, th Wantonness: Hence, when they pay their  
Visits, and1 mutual Compliments, ’ they always have the *Betle* **in**thch Hands ; and in is every-where presented with the greatest  
Demonstrations of Benevolenoe, along with Arcea and Lime,  
in a wooden Vessel' kept on purpose. They chew it principally  
after Dinner, inorder to prevent. Uneasiness at their Stomachs.

They sometimes ufe to abstain from it, when performing the,  
funeral Rites of their near Relations, and on certain Days **set**apart for sasting.i ' ‘ " " ' -. - .

It strengthens the Gums, corroborates the Heart and Sto-  
mach, discusses Flatulences, and purges the Stomach and Brain j  
if chev/’d'in the. Morning, immediately after Breakfast, itren-  
dels the Breath agreeable, but blackens the Teeth, and, accord-  
ing to *Pontius,* not only corrodes, but makes them sell. ent.

The *Portuguese* Women imitate the *Indians* in this Particular,  
and are so excessively fond os chewing the *Bctle,* that they think  
they cannot live without it. *Raii Histor. Plantar .so* Si;

BETONICA, Offic. Ger. 557. Emac. 7I4. Rah Hist. I.  
550. Synop. 3. 238. Mer. Pin. I5.-Payin. Dr. Mon. Dish  
. Cat. Giff. I26. *Betonica vulgaris,* Merc..,Plot. I. 23. Phyt.

Brit. I5. *Betonica purpurea,* C. Β. Put. 233. Touch. Insh  
2O2. Elem. Bot. I 72. Boerh. Ind. ATI54. Rupp. Flor. Jen.  
136. Buxis. 37. *Betonica, vulgaris purpurea, f.* B. 3. 36.1.

*. Betonica vulgatior, 'fiorei.purpureo,* Park. Theat. 6I4. *Betonica  
siue Fetontca,* Chab; 43rs W0OD BETONY.. *Dale.. .. r.*

The Root of *Betony isspdesty* thick or the Head; whence st  
sends out a great Number of small Fibres, *- os* an unpleasant nau-  
seous Taste. The .Leaves grow on pretty long Foot-stalks,  
somewhat winkled, rough and hairy, fall os Veins, hroader-at  
Bottom than at the End, which is blunt-pointed.; they-are  
roundly indented about the Edges. The Stalk is four-square,  
about a Foot or more high, with Very sew-Joints ; as each of  
i which stand two Leaves, one opposite to., the other, op short  
. Foot-stalks. TheTlowers grow in Spikes on the Tops of the  
Stalks, *vcrtioillatirti,-* or .whorle-sashion, two,, small Leaves her  
ing placed under each.Whorles: they are of a ted purplish .Co-  
lour, of one single Flower, having a round *Galea,* and d *sca-  
bella* divided into three Parts, each growing in a rough five-  
pointed Calyx, in which, after the FlowerS are past, grow four  
small Seeds. " .'so-'... ... . . : -sc -u:;

*Betony* grows in Woods and,Thickets,,-and.by Hedge-sides,  
. and flowers in *May* and *Tune.*i The Leaves, and Flowers are  
used. .Ti' susususi sc.. -. .. ἐν.τ. - *A*

*Betony* is a good cephalfc;. hepatic, and Vuinerary Plant, of  
' so great Esteem among, rhe..Antients, *frikia'Antonius Mufa,*Physician to *Augustus'Casiar,* wrote a whole Treatise,concert)-  
ing it. It is Very good inPains os the Head, Convulsions,; and  
nervine Affections, ί The dried Leaves, out and mix’d with  
Tobacco, are frequ entry .fmoak’d for the Head-ach, Vertigo,  
and sore Eyes. Mix'd wsthWood-sage .and Ground-pine, it  
makes a good Diet-drink for the Gout and rheumatic Pains,  
The fresh Leaves, bruis'd, are good for green Wounds, and Io  
draw out Splinters. Ἄ. . . “ /t ; ... .. .so

The only officinal Preparation from this Herb is *sm. Em-  
plastrum de Betonica. Mfllrtis Bot. Off. ,; . .. so sp.pri*

The Leaves of this Plant have an herby Taste, are a little  
saltish and aromatic, and give no Tincture of red to the blue  
Paper. The Flowers and Roots, which are very hitter, stain  
it Very little. The *Pctonysis* Tull of Sulphur, mix'd with a little  
oily. Volatile Salt and Earth/ ; . ; :/...

By the chymical Analysis It affords a great deal of Oil, a little  
Earth, find fix’d Salt; no concreted Volatile Salt,, hut a little  
- urinous Spirit. si: ; ~

The *Betony* is Vulnerary, aperitive, diuretic, sweetening, good  
Tor the Diseases of the Brain and lower Belly ; a Tea of che  
Leaves is good sor the Vapours, Sciatica, .Gout, Pains in the  
Head, Jaundice, and Palsy : The Ptifan of. its Leaves, a coin  
Infusion of them in Water,. the Conserve of its Flowers, the  
Syrup of the Flowers and Leaves, and the Juice and Extract of  
these Parts, have the same Virtues: jThey promote Expectora-  
tion, and bring away pusulentrMatter.;': thby-consolidate inter-  
nal Ulcers,imd remove Obstructions in the.Bow ess;. A Sneezing  
Powder .is made ofisheLeasais, and a Vuinerary and cephalic  
plaister in prepar'd with the Juice r . The. Roote .have not the  
fame "Effect, but thefe purge both-'upwardsand downwards.  
*Marlyrst.s-T.ournes.ort. . ,.... ...... . ; ... .*

A Decoction of Herniaria- and *Betony* is commended for the  
Stone, in the,Kidneys and Bladder. , Others advise a Decoction  
os *Betony* -to stop a Pink of the Lochia after the Birth. , The  
SurgeonSmix .it In their cephalic Cataplasms. . They make a  
Plaistersof ' the Leaves sor Wounds, especially those of the  
Head.*i. Boerhaave.* ,.s, ;j... . - ‘ ;

In the7 old Dispensatory of the College, a Conserve of the  
Flowers of *Balony* was directed, which is omitted in the pre-  
.sent. ' Some Authors, however, hevea .Very great Opinion ofitio

**EMPLASTRUM DE** *BETQHiiferetBetony Pfoistati.supe*

E^e Ps lVeen *Betony,* Pimpinel, 'Agrimony, Sage, Penny-  
. royal, .Yarrow, the lesser Centaury, and Clary, each she

..Ounces; of Frankincense and Mastich, each two. Drams;  
./. of.Ornceand round Birthwort, each six’Drams;of Wax

and Turpentine, each eight Qunces;. of Refin of the  
..st Pine-tree, six Ounces . os Gum-elemi, and Oil Of.Firr,  
each two Ounces ; of White-wine, three Pounds. Let  
.. , the Heths he well bruis'd in a Mortar, and stand in Macera-  
. -tion for a "Week with the White-wine, and then stirred

about andiboil'd : When the Wino is pressed out, strain'd,  
.and hed'd'to the Consumption of a third\* Part, put to it

the Oil os Firr, then the melted Wax, afterwards the  
. . .. Refin arid Guins, and last os all the Turpentine. When  
.. .. these have had a gentie Boil, and been taken from the Fine,  
and near cooled, sisysh it the Orrice anthBirthwort in fine

. s . Powder, and stir them briskly together, so as to'make into  
.into a Plaister, *S.A. .*

*s* This hath.passed thro' all the Revifes of our College with  
- little Or no. Alteration, butts.no tin any other officinalDispen-  
satory that I heve met with. It requires a good deal os Care  
- and Troublein' the Composition;. yet, as it is sometimes met  
with in Prescription,' most of the Shops are at the Pains to keep

by them.. ...; T so ..νύ . - ..:

BETONICA AQUATICA- See ScROPHULARIA.

..zi BETONICA FAULL o See VERONICA MAs. .? ς  
*. Betula,* Offic. Co B. Pin. 427L LJ. B. I. Iith. Raii Hist. 2.  
I4IO. Synop..3. 443. Chase fio.: i.Ger.. 1295A Emac. I478.  
Park.Theat. I4O8i Tourn.-Inst. 588. Elem. Bot. 46o. Boerh.  
-Ind. A- ,2. I82. Dill. Cat. Gissi 42. Rupp. Flor. Jen. 265.  
iluxh.. 38s; Merc..Bot. , I. 23. Phyt. Brit. 15. Mer. Pin. I5.

‘ Jons. Dendt. 33; THE BIRCH-TREE.. *Dale, sc*

BETULA. .. Ἀ , ss:ffa.. .".-su :

Thia Tree grows to be tall and large, cover’donthe Outside  
. with a whitish Bark, whichjt sheds yearly. It has. a great Num-  
; her of;flondes,-tough, red Twigs, Or small Branches, cloathed  
...with small;, roundish, green .Leaves, -indented about the Edges  
these are preceded, by littie scaly round Cones, which contain  
the Seed. It grows in Woods in divers Parts of the Land.

The Leaves of the Birch-tree are, accounted, good for the  
Dropsy, aS also for the Itch, used both inwardlyanthoutwardly.  
.-The Liquor that stows out of this- Tree, bored with an Augre  
. in the Spring,..din. accounted to be very good for. the Stone and

Gravel, and against bloody Urine, and the Strangury.. The  
YWood makes good Fire-wood,/and, rrexuto Juniper, isprefer'd  
-to burn in Times: of Pestilence,-and contagious Distempers.  
*'JMillests Pot.scoffer...-...-tat* X.-:-. μ . ‘ ? . f:

*The Bark os* the Birch-tree, -ssvery fine. *Tragus* says, that  
he has seen, in a Library at *Coire* in *flwitzcrland,* Werses writ-  
-ten upon it;Iheysuse it to this Day to.make Ropesssor Wells :  
They affirm, that the Liquor which comes out of the Trunk of  
this Tree, after it has heen pierced with an Augre in the Spring,  
. is very aperitive, detersive, and cosmetic ; they ascribe the same  
.Virtues to .its depurated Juice, and distill’d Water.: *Marlfoes-  
TrourneforL.Asc. r.* -tss ' ’

. rBETULUS. A Tree; call’d also OsTRvs, which see...

BEX. Βῆξ, R' Cough, is nothing else but a Vehement Estia-  
ttion, in which a great Quantity of Breath, beingthurry'd forth  
with Vast Swiftness, attracts andpushes forward, by jts impetuo-  
sity, whatever obstructs its Pafiage joand, if it. be too Tveak ta  
.expel the offensive Matter, at the-first Discharge, it faiis not to  
renew: its Effort even once and again. \_ For the most part, it oh-  
-tains its End ; that is, whenever the Breath passes with astrong  
-Current, and the OhshuctingTviatter is dispos'd for Expulsion,-  
aswhen it is neither of a watery Iior Viscous Substance.. *-Galen  
De Sympt. Causis, Lib.* 2. *Cap.A.* ..-.’''.ἐν.'.. l.

c ἠ. The End of a Cough is to cleanse the Passage of. the Breath.  
*Idem, so* 6. *Liipp. de Morb.ayulg..Com.si.* See TUSsIs.l:

BEXUGO. This is the Root os the *Clematitis Portsuiana  
sas-Cas.p. Pauhbio..*' It is purgnitive, taken in the Quantify: os a  
Dram.;. The *Indians prefer* it to *Mechoaean. .*

. PEYA, Jn.the alchymistieal Jargon, *isibe Aqua Myrcuriop.  
sis. Mercurial W*ater, .which is Wise to the *Gabrien, eDy. Sulphur  
Phelofephorscm,frdipisut* oflthe:Philosophers. . . . οὐρ.ί ."j t.

BEZOARi-ῖ usuimzolar is the first .who menfionsdSazohe aS  
us'd by way of Medicine, or gives its History.' Hersays, that  
is best which in sound in the East, near the Eyes os Stags. But  
that which has gone under that Name in these latter Centuries,  
in, according to the. best Accounts,: always soundin the Sto-  
ruach,4.r father Omasum, *of* theCervicapra; . /7

This is originally a *Persian* Word, namely, *Badzchcr,* or  
*Bazchcr,* which, in that Language, signifies no more.than any  
Substande intended-to prevent the fatal Effects ros Poison ;at.d  
the *Persians* us'd the Word -, in jthe same Sense in .which the  
*Greebs* us'd the Word ssncetiord,-.whether that Antidote was a  
simple or a-’compound Medicine;. Tint the Word' came.after-  
.wards to he peculiarly appropriated to that Species, of Stone,  
which,, by a Corruption of the- *Persian* Word, we' now call  
*Bescaar.* Some *Arabian* Authorsheve. asserted; that.this Stone  
was only to be found in Mines; and others, that nt .was to be  
met with in the Heads of certain Serpents: But the most judi-  
cions Authors of that Nation have given an Account, which  
has since heen consum’d by the Relations of several Travellers,  
which is, that this Stone is found in the Corners of the eyes  
of such Stags as have eat Serpents.;, where, growing gradually  
bigger, by the Formation os one Crust above another, it at last  
acquires such a Weight, as to drop, off of its own accord, and is  
found in the sandy Grounds *cd .China* and *Tobaut* or *To bet.* Is  
applied.to Wounds, ocposton’d-by-the Bites of venomous Ani-  
mals, it extracts the Poison lodg’d in them ; sor, aS soon aS it  
comes into Contact with a Wound of this kind, it adheres to  
it of its own accord; and, aster having absorb'd as much of  
the Poison as it can contain, it discharges its venomous Contents  
in the Water in which .It in immersed.. .After which it is to be

apply'd afresh to the Wound, to whlch it adheres 'till it. has  
produc’d its design'd Effect, and brought aheut a thorough Cure;  
*Ficrbelot Bibliotheque Orientale.*

- Mr. *Hcrbelot* seems to give too much Credit to. this Oriental  
Account of the Production and Virtues *of Bera dr,* which is  
sabulous.

*Bezoar* is nothing else but a Stone form'd hy the Gall  
of several Species of Animais, found in the *East* and *West-  
Indies,* such as Goats, Hogs, Apes, *etc.* The Virtues of  
the *Bezoar* consist in the Volatile alcaline Salts of winch 'tis  
compos'd, since 'tis, in reality, nothing but the Bile of these’  
Animais. Tis by means of these Volatile alcaline Salsa that it  
destroys Acids, and promotes Transpiration. We have no  
Occasion to go far in quest of *Bexoar* Stones, fince all Stones,  
form'd by the Gall of any Animal whatever, are such, tho'  
their Activity and Virtues differ according to the different Ani-  
Inals from which they are taken, and the different Climates in  
whichthese Animals live. The *Bezoar* Stone is also sometimes  
found in other Parts of these Animais besides the Gall-bladder.  
*fHist. de lAcad. A. sspCAsi. , .*

There are several Medicines us’d in the Practice of Physic,  
with regard to the Origin and true Account of which, we *Ear  
repeansare* still pretty much in the Dark : They sometimes pass  
thro' so many different Hands before they arrive at ours, that  
Itis no easy Tash to form a true Judgment of their Natures and  
Compositions. ....

Merchants, who deal in Commodities of tins kind. Very often  
know no more than the Name of the Medicines, and are more  
intent upon making Profit by their Sale, than enriching their  
Minds with a Knowledge of their Origin and Qualities. Tra-  
vellers, on the other hand, have not always an Opportunity of  
procuring the Evidence of their Senses, in Cases of this Nature;  
they often rely on the Relations of others, with regaid to Things  
they themselves have not seen. In Matters therefore of this  
Kind, ah accurate and minute Examination of any Substance  
is sometimes os more Use and importance, than a great many  
Accounts and Relations concerning it. This Consideration in-  
duc'd ine to undertake a Very Careful Examination os the several  
Substances call'd *Bezoar,* a Name given to a particular Species  
of Stones found in the Bedies of certain Animais. Some affirm,  
that the Name *Bezoar* comes originally from the *Persian* Word  
*Bazar* or *Pasoan,* which signifies Dung or Dirt ; others main-  
rain, that it is deriv'd from the *Hebrew* or *ChaldeanNCati Belu-  
usaar,* which means a Medicine against Poifons.'

The fust Stones known under the Name of *Bezoar* were ini-  
ported from the Eastern Nations ; but, fince the Discovery of  
*America,* we have had some brought to us, which resembling  
the former heth in the Conformation of their Parts, and their  
medicinal Virtues, have.heen also call'd *Bezoars,* only with this  
Difference, that what comes from the *Levant* is call'd *Oriental  
Bezoar,* and what is imported from *America* receives the Name  
of *Occidental Bezoar.* There are also other stony Concretions  
taken from Animals, which are dispos’d in *Strata,* and have  
heen Call'd *Bezoars* ; but these have been distinguish'd by the  
Names of the particular Animais from which they happen to he  
taken; such, for Instance, are the *Bezoar of* the Ape, and  
\_ that of the *Cayman.* Some, taking the Word *Bezoar* for a ge-  
neral Name, signifying any Medicine against Poison, have ap-  
plied it, without Distinction, to every Substance of that Na-  
:ture: So that the Name *Bezoar* has been affix'd to chymical  
Preparations, such aS the *Mincral* and *Jovial Bezoars*: With  
others, a Powder of the Heart and Liver of Vipers has heen  
styl'd *Bexoar.* The Name *Bezoar,* or rather the Epithet *Be-  
zoardic,* has also heen hestowed upon some Powders, or artificial  
Stones, in which the *Bedaar* is an Ingredient; such as the  
***Count*** *esc of Kent's Powder,* and the *Goa Stone. ' . \**

Some People, observing that *Eeaoar* was dispos'd in *Strata,*have given the same Name, and ascrib'd the same medicinal  
Qualities, to a Stone resembling it in the Conformation os its  
Parts, and which is found in several Parts of the Earth in *Ame-  
rica. Bezoars os* this kind are to be found in *Italy, in Sicily,*and even in several Parts of *France,* but especially in *Languedoc.*

These are, in general, the several Substances known under  
the Name of *Bezoar* ; but, strictly speaking. *Bezoar is a Sub:.  
stance of. a stony Nature, extracted from some Animal, compord  
of several Strata or Layers, like those of Onions, and which  
. possesses a certain Quality, by means of which it resists Poifons.*

The two principal Species of this Medicine are, as we have al-  
, ready said, the *Oriental* and the *Occidental Bezoars.* We have

not, aS yet, arriv'd at an absolute Certainty whet particular  
Animals produce these two different Species, hecause, 'tis pos-  
sible, People may have said concerning both, whet was only  
true of one of the Species: Only this much we know in general,  
that this Stone is form'd in the Stomach of a certain wild Goat,  
which brouses upon aromatic Plants. If we may give Credit to  
*Tavernier,* there are several of these Stones to be found in  
one and the fame Animal, the Truth of which, he says, wo  
- discover by the Touch. These Stones are of different

Shapes and Sizes : Some of them are of the Form of a Kidney,  
er *French* Bean; Ushers are round, oblong, and Of an Irregular

Figure. Each . Stone of this hind is compos’d *.si sicrettsu.*Laminae, form'd of a greenish or olihercolour'd **Subfiance., di-‘**versisy'd with white Streaks, which run thro' ths**wheinLGdy**of the Stonel These 2am mnlonad here *so* closely to one **another,**that, upon breaking the Stone, we niay observe several Layers  
of different Thicknesses, and even sometimes of different Co-  
lours. There are also found Laminae, which, upon breaking  
these Stones, disengage, add separate themselves Very regularly'  
from each other; which they also do when a considerable Degree  
of Heat is apply'd to them. The Substance which possesses the  
Middle or Centre of these *Bezoars,* is nfually hard,- gravellys  
and pretty smooth. The *Bexcardic* Layers, winch coyer this Sub-  
stance, are easily broken between the Teeth, to which they ad-  
here like a gently glutinous Substance, and tinge the Saliva a  
little. **. r ’ S . ‘ . . .. sc so. '...**

Upon burning some of these Layers, I found that they were  
easily inflammable, and contain'd a Volatile Salt and an Oil?  
The Matter winch remain'd after their being bunt'd,' resembled  
the *Caput Me'rtuurn* which remains in the Retort aster the Di-  
stillation of animal Substances. These Stones are smooth oti  
their Surfaces, but sometimes, on certain Parts, are rough and  
unpohsh'd, like Shagreen.. .They are pretty tender, and, if  
apply'd within considerable Degree os Force to Paper, rubb'd  
oyer with Chalk, White-lead, or Lithe, they wear away, and  
finge the Paper, thus prepared, with a yellow, greenish, or  
olive Colour, leaving some Part of their Substance upon **the**Chalk, White-lead, or Lime. I steep'd two of these Stones  
in cold Liquor, the one in Water, the other in Spirit of  
Wine,- for twelve Hours, without any apparent Change or Al-  
teration heing produced in them. ’ I left the same Stone in the  
Water for some Days, during which Time there was so very  
small a Quantity of Matter separated from it, as only render'd  
the Water gently turbid ; the Water and Spirit of Wine had  
nevertheless penetrated both the Stones.;. . —

’ Among the greatNumber of*BerAar* Stones I havebrokensor.  
the sake of Examination, I have found many, in the Middles of  
winch, agreeably to the Accounts of some Authors, there were  
Straws, Hairs, Maroassites, Flints, and gravelly Concretions,’  
Ss much compacted, and aS hard, aS the Stones themselves. Id  
some of them I have also found Tale, .Wood,. Stones almost  
resembling those os Cherries, Stones os Myrabalans, and Frag-  
ments os the Stones of other Fruits. In some I have also found  
a Sort of Cassia-nuss and Kidney-beans, included in a Coat  
or Membrane, the external Surface of which was indurated by  
the Matter of winch the *Bezoar* is form’d, and in which the  
proper Membrane wasshriVell'd up,'and become dry. In others  
I have found the first Covering wasted ; and the entire Stones,  
upon heing struck, sounded like Eagle-stones. I have endea-  
‘vour'd to prick one of these Stones with a red-hot .Needle, in  
order to discover whether it was genuine or not; but the Needle  
did not prick them, and only left a brownish Mark where It  
touch’d them ; which Method some Authors have proposed as  
the most effectual for distinguishing the good from the coun'-  
terseit, assuring us at the same time, that those in which the  
Kidney-beans" were found, are counterfeited by the Inha-  
bitants os the several Countries' from which this Cornmodityis  
imported; ' . " si - so .

These Authors, therefore, advise us to make Choice of the  
*Nezoar.* Stones which, are *of* a moderate Bulk, of a brownish  
Colour, and which communicate a yellow Colour to Quick-  
lime, a greenish one to Chalk, and which cannot be dissolved  
in Water. If prick'd with a hot Iron, no Bubbles ought to  
arise round the Iron, which is a Proof, that it is not adulterated  
with any Rosins. The Laminae also must be fine, and  
’ difpos'd in Strata. The hest Species of these Stones are taken  
Trom Animais that’ feed on large Mountains, such aS those of

*Persia.* After all, it appears to me a hard Talk to counterfeit  
*Bezoar* ; and any one who has been in the least conversant in  
this Commodity, may by his Sight only, as well as by the. .  
other Marks I have hid down, discover the Imposture ; for, if  
it was counterfeited with Plaster, or any other Substance of a  
similar Nature, it would neither undergo a Change by means  
" of Fire nor Water, nor convey its Colour to Lime, nor, in a'  
word, would it he able to stand all the several Methods of  
Proof for distinguishing the genuine from the counterfeit.

Nor is it credible, that, in order to counterfeit it, People  
should be ast the Pains to seek sor'all those different Materials,  
which serve as a Ground-work for the Laminas, or Beds os  
which'Iis compos'd ; since, without so much Ceremony, they  
have only Occasion to begin it upon a small Ball of the same  
Matter, winch, in all Probability, is not Very scarce.si . ‘

I am of Opinion, that the Substances included in the *Bezoar*Stones discover to us the precise Manner in which they are  
form'd, as *Tavernier* observes, who says, that, these Stones are  
form'd around the small Beds or Tops of theBranchesof a cer-  
tain Plant, i These Buds os *Tavernier* may possibly be the same  
with the Kidney-beans mention’d by *Morande* and which I  
myself have observed. These solid and indigestible **Bodies,** re-  
maining in the Stomachs of these Animals, irritate then Glands;  
and the thick Lymph which these Glands discharge, together

with **the** Menstruum *of* the Stomach, which is’ impregnated  
with the Juice of the aromatic Plants, upon which they seed,  
form those regular, smooth, and beautiful Layers, which *Ast*would in quin attempt to , imitate ; and I have even observ’d,  
that whatever Substance, was lodg’d in the Centre of these  
Stones, the Strata were so fine, and so west dispos’d, that **the**external Figures of the Stones bear a Resemblance to that of  
the Substance lodged .within them. -

If, for Example, a Piece of Straw he the Ground-work,  
the Stone form'd upomit will he long; if it is A Piece of Flint,  
the Stone will preserve the same Figure., and, is a Kidney-bean,  
we may observe externally the Radicle, and the Line which  
separates the two Lobes of the Bean, in short, from the Form  
and Weighs of these Stones, we are enabled to *judge* effectsally  
of the particular Substances on which they are form’d. Thus,  
asm a Commodity so precious as *Bezoar, some* are not allowed  
to break each Stone, we must therefore trust io the Touch and  
Sight, after having try’d our Experiments upon, some of the  
most suspicious ones.. By the Sight we are enabled at once to  
form a judgment of the Colour, which ought to be neither too  
pale nor too deep. Secondly, we are to judge of it from the  
Fineness of the Grain, and. the Texture being so smooth and  
close, that the several lamina are not easily-separated from  
each other. We must also take care to choose those which  
are of a regular Figure; that, for Instance, of a Kidney, **a**Bird’s-egg, or some other similar Form. By the Touch wa  
may also judge of the Substance induced in the *Bezoar,* since  
the Weight or Lightness will determine that Point very well.  
If, sor Instance, the Stone is heavy, the Ground-work, or  
Substance on which it is form’d, will he a Portion of Flint,  
possessing the greater Part of the Stone. If, on the other  
hand, the Stone is light, it will either be hollow internally, or  
include orily some light Substance, such as a Collection of Hairs,  
or some of the vegetable Substances I have already mentioned.  
The Stones which sound upon being struck, probably heve,  
for their Groundwork, some Fruit, which, either becoming  
dry, shrinks up into a smaller Bulk then it at first hed, or else is  
putrefied, and reduc’d to a Powder which some Authors esteem  
veryniucin ' ' . ."

I haveobserv’d also, thatwhen the *Bezoar* Stones areof thcSbape  
and Formosa Kidney, seel light, and yield a Sou nd, a Kidney-  
bean is ordinarlly the Substance on which they are forrn’di  
There are others of these Stones which are also light, of a  
round and somewhat fiat Figure. These, upon Trial, I found  
contain’d a round and flat Fruit, almost of the Figure os a  
Cassia-nut. Besides, tho’ these Bezoars should includehard Stones  
of Fruit, (Instances of which have been met with) or even Por-  
tions of Wood, yet still their Lightness renders them preferable,  
proviced the *Bezoardic* Matter bears the other Proofs, to these  
form’d upon Flints, and which are much more heavy.

, For answering its common Intentions in Physic, the Method  
of preparing *Bexoar* is, to reduce it to a sine Powder, whether  
with a View to be taken in Substance, or to serve as an ingre-  
dient infome other Compositions; provided we reinemher -to  
pulverize only the *Bessoardic* Part, and to separate all adventi-  
tious Substances, especially Flints, and other Things which  
have none of the Qualities of *Bezoar,* and which are lodg’d in  
them- "so ‘ ..-

The Sentiments of People are strangely divided with regard  
to the Animals which produce the *Oriental* and' *Occidental Be-  
scoars:* But it appears, that the *Oriental Bezoar,* which is  
brought to us from *Egypt* and . *Persta,* the *East-indies* and  
*China,* is produc’d by a species of wild Goat, which the *Per.  
stanri*call *Pazan,* and which is larger than ordinary, swift as'a  
Deer, and .has Horns reclining on its Backfor which Reason  
*Cluseus* calls it *Capricerva,* and which is thus distinguish’d: .

*Capra five Gazella Bezsardica Orientalis,* Offic. *Guaella  
Indica, cornibus rectis st/igistirnis nigris, prope Caput tantum  
anntstatis,* Rail Synop. Α. 79. *Capricerva Orientalis, e qua  
Lapis Bezoar. Orientalis,* Sctirod. 5. 277. *Caper five Hircus  
Benearticus,* Aldrov. de Quadi Bisul. 755.\*’ *Capra five Hircus  
Bezoarticus vel potius Pazaharticus,* Jons de Quad. 56. *Hircus  
Beocoarticus,* Charlt. Exer. *I* I. THE BEZOAR GOAT.

That Species of *Beziar* which is imported from *America,* is  
produc’d by a Goar, which differs little or none at all from  
the former, except with regard to its Horns. \_ It is thus di-  
stinguish’d;

*Cervus minor Americanus Bezoarticus,* Offic. *Capricerva*Oreidurnascs, Schred. 5. 278. *.Maxamaseu Cervus,* Hern. 324.  
*Caguacurite,* Marcg. 235: *Caguacu-apord,* Ej'-isd. *stive mat et  
fnemina,* Raii Svnop. A. qo. Pis (edit I6;8) 98., THE  
LESSER AMERICAN DEER.- J

*Pomet* describes the *Oriental Bescsar* Goat thus, from.M. *du  
Rental:* It is a very active Animal, fays he. that strips from  
Rock to Rock, at his Ease, and is very fierce, Io that when he  
is olosely pursued, he sometimes. kilis the’ *Indian* Hunters.  
The Hoof, or Claws of his Feet, are divided neither more or  
lest than the Goat’s , the Legs are pretty thick, the Tail short  
and turn’d up1; the Body hairy, as that of the Tie-goat, hut  
shorter, and of afi Ashinoldur, inclining to Red, or. rather of

**the** Colour of the Hind’s Belly; the Head is shap’d tike the  
Goat, and arm’d with two black Horns, jagged an the lower:Part, and tumid backwards. ... . y"

The great Variety of Opinions advanc’d by different Au-,  
thors, with regard to the Name and Shape of this Animal, inc.  
duce me to believe,, that there are sevemi Species of Animals'  
in which these Stones are found, and that each Author haa  
deserib’d the particular Species which he has had an Opportunity  
of feeing. This Redon may also account for the disserent Co;  
lours of *Bezoar.*

The *Occidental Bezoar* is easily known from its being of *pl*paler Colour: It is sometimes of a Greyish-white, arid is form’d  
on Substances of the fame kind with the Oriental. Its Laminse  
are also sometimes. thicker and striated according to their’  
Thickness. ' . *. so .. 'so .so. i ' 'sc*

The fossile *Bezoars* are Species of Stones, form’d by Strata  
or Beds, and in Figure resemble the animal *Bezoar.* They  
are ordinarily of a grey-whitish Colour: Their *Stratu* are pretty  
minute, they have, no Smell ; and are used in the same Dis.’  
orders for which the other *Bezoars* are thought proper. *Amec  
rica* firpplies us with large Quantities of these *Bezoars,* and  
they are also to be sound in *Italy,' suri* sevemi Parts of *France.*Mineral *Bezoar* is thus distinguish’d

BEZOAR MINERALE, *Terra Sicula, Eetcoardicum Mi-,  
nerale,* Mont led. Exot. I4. *' Bezoar Minerale,* -Aldrory  
Musi Metall. 805. *Lapis Bezoar Minerale Siculus,* Bedc. Obf.  
Ed. Ind. 379. *Lapis Beosahan Siculus albus, Qrientali fragul*dur, Cup. Hort. Cash. Supp. I. 246. *Lapis Bezoar fosilis,*Geoff. Prelect. 69. De Laet. de Lap. II4. *Besmear Minera..  
Jis Sicilians,* Bocc. Mus.diFisicaec..M1NERALBEZOAR,  
or SICILIAN EARTH. ' 5

There are some other Substances, which, from the Manner *of*their Production, -are called *Bezoar.* Thus there are the

BEZOAR GERMANICUM. *German* Bezoar. See  
**AEGAGRopiLA; ' - ’**

BEZOAR HYSTRICINUM. SeeHYsTRIx.

( BEZOAR MICRQCOSMI, is the human Calculus.

BEZOAR.SIMIAE. SeeSrMIA. - I ' '' . "

Those who heve written upon Bezoars, 2nd amongst others  
*Caspar Baapine,* have comprehended under thet Name a great  
many Substances which have riot the least Affinity to Bezoar,  
which must undoubtedly introduce Disorder and Coofubon into  
natural History. Is then we were to range into a proper Or-  
derail the Substances which can come properly under the Deno-  
-mination of*Bezoar,* I think we.might very properly reduce  
them to sive.Clastesi” ' '. „ τ' Ψ’ τ ἐν \* ' ... 'ἐν

The first of which should contain the true *Bezoars,* which  
are the Oriental and Occidental. /

The. second should comprehend all Stones extraoled from  
Animals, which approach to the Bezoar’in the Conformation of  
Yhei.r Parts, or their Qualities ; such as the Bezoar of the Ape,  
what of the Cayman, and even the various Species of Pearls and  
Crabs-eyes.'... X.. I ?'

C'Iri the thud Clasts should be ranked the sevemi Species''os sof.  
isileBezoars.’ ς . ' ' - - - - -

in the fourth should be placed' those Substances iybrch'are  
shaped silfe Bedoar, without having its.Virtues στ such as the  
Stones sound an 'the. human Bladder, Kidneys, and Gall-blad-  
der; as' also these' that are sound in the Gall-bladders os Oxen,  
lor other Aninialss Issi- 67’y-'. ’ i *‘"sc.s.scso.si a*

In the fifth and last Class should be ranged- *majAigagrapist,*which are a Species of Balls of different Figures, ’and yety.lighi,  
- formed by a Collection ofHairs/anilTibres of Plants;whichthe  
' Animals,' in whose Stomachs they yvere lodg’d .could) nbt digefl.  
'These Fibres and Hairs are St last "so"interwoven with one ad- ’  
other, as to.sorm one Body, which resembles a Ballinf.Feit.hTe  
that employed in making, coarse Hats, ' Some, of these bre found  
covered with S. very fine Crust of Eepoar...' They,ofc ordinarily  
found in thesirstV ehincle of in ruminating Aniniajsiinr 'in the  
Stomach of such as jotiot ruminate;, such are the.Beosiea found  
in the wild Porcupine, and other. Balls of.Hjair. found in Goa^,  
Oxen, Cows, and other Animcis. \.sssein. *de T'AcaApdur* r'7to'. '

In a subsequent MemoirMI. .conthiuing'the SubjeS

*of Beiorar,* proceeds thiss: - ττ ",‘χ ' ' i ’ ..’.’"-'εἴτ ' ‘

5 I have already obferved, that' there -was almoshiljways-’some  
kind of Substance, round wnichjoe cezoardic Ssraci amisormid  
and disposed.; 'and this Circumstance her" to.meapfitioed,aiMarie,  
that these stones were hot couriterfeitedSisinde any,one that  
would attempt to coiinttrscit'indinj would not,’ ihiSll Proba-  
bility, he at the Pains os collecting ‘so great a Variety, of Mate-  
rials as’ arc generally'sound in'thpseisubstances;.vtioctiofe .the  
Bases or'Ground-works ofdisivreist.Eeaoar-staines.y'

-The sessile*Besuar* is also fotio’d. in the same mamiejs *Anc-  
sone* has in them observed Fruitosioram.of varioustiorts;;,iFlints,  
Gravel-stones,‘Wood, Metal, Coal,. and other Sctistafees.- I  
examined some of these comm only colled *.PriapslifIs/iirsucii* are  
sound in *Langue 'dcis* and I had one of this Kind given.rne.hy  
MI. *Bon,* in the.Heart of .whici; there tvas. issscede. of iRocti-  
crystal.

.6 **Among the several Substances sound in the animal Beizoaris**stones, I have observed One, which, to me,, appeared Very like  
theCaffiaimit, ora Tamarind-stone, though, smaller-However,  
I have fince found, that in might possibly,he the Seed of 2 certain  
Pod, winch I had not then seen, and which resembles the Seed  
of the Pod produced by the true *Egyptian* Acacia, which grows  
*in Egypt,* **in** *Arabia,* and in several other Places.' This Pod in  
imported to us from *Senegal,* and is three Inches or three inches  
and an half long, and thine' or ten Lines in 'Circinnserence. It  
is composed of two Membranes, one external, and another in-  
ternal. The external Membrane:is very tenders *ess* a brownish  
Colour, and adheres to the internal One, which is cartilaginous,  
and very slender... The Substance" which unites'them is of a  
gummy Nature, of a yellowish transparent Colour, melts in the  
Mouth, and is of a Very bitter Taste. . In the longest of these  
Pods Lhave'found eight Seeds, .separated; from.each other by a  
fort os.'Coat, ..which unites theotwo Sides of the-internal Mem-  
brane. Every Cavity Of; i these. Pods contains a flat Seed, re-  
sembling that of a Lupin, sometimes exactly circular; and some-  
times aiittin compreffed by the Coats joining the two Mem-  
branes of the Pods, winch are more contracted in the Middle  
than towards the Extremities ; so that the Seeds in the Middle  
**of** the Pod' are a little compressed, and those at its Extremities  
perfectly hound; οῦ.ι.μα .6 - - ’

Whatinedeime suspect, that these Seeds were the same I had  
observed in the Hearts of the Bezoar, which are round; and a  
littie flat, is, that in both I have found the same Marks, and  
among others a whitish circular Line drawn-on every Surface os  
each Seed, resembling that: sound on; the Substance included in  
theBeaoar. Iput some os these Seeds into Water, where they  
swelPd almost in the same manner they were sound to do in the  
Stomach os the Animal,'when they were beginning to have the  
hezoardic Matter form'd upon them. The Tincture I extracted  
from these Seeds wasofa red'Colour, a very bitter Taste, and,  
upon: the Addition: of a I littie Vitriol, became black. \_ Im the  
Countries where these Peds and Seeds are produced, the Inhabit-  
ants use them for tanning Leather. From a: Decoction of  
them in Water; there.is a Juice extracted, which, whentnspis-  
sated, is imported tout under the Name os the Juice of *Acaciai*Some also asiert, that what we call the Gum Arabic, or Gum  
Senegal,-stows from this Tree, ol Is there then arty Probability,  
that the Persons-who are said to-counterfeit the Bezoar, should  
he at the Pains, among other things, to seek Tor the Fruit *of*the *Acacia* as the Stamina or Ground-works of-their Compo-  
sitions? Orfis in not snore probable, that this Friiit, and some  
others-used for the Pasturage Of Cattie, by thetriastringent Qua-  
Fries, producer an Inspissation of the juices in the Stomache of  
those Animals, which seed nii^-eommoHl'y orr them, and that  
in Consequence of tins Inspissation-theBekoar-stones are form’d?  
*e* t This therP is: the .Manner in. which thefe Stones are form'd in  
the Stomachs of the several Animals which produce them. Several  
Of them may be found in the-Stomach of one and the sameAni-  
mal; and *Tavernier,*tells uaexprefly, that six of these Goats,  
which he received aS -a Present, hadinrnorig' them all seventeen  
*Bexoars,* which might have been felt and number'd by touching  
their Stomachs externally sp ; and that this Circutnstance aug-  
mented the Price os- the-Animals, ’in proportion-'to the Number  
of Stones discover’d. This Account agrees intirely with that  
given by *Clusius* of the Animal which produces the Occidental  
*Eeaaear.* Ή& says, that aFiiendofthis at *Peru,* whofirst disco-  
Ver’d the Occidental Bezoar, having a Mind to know how these  
Stones were formed in theBodies'of these Animals, dissected one  
ps-them,,;;inr.whose Stonimch he sound, a kind-of Cystis,: in which  
’thefe Stones were ranged and: disposed, in the shine manner with  
theBntionsssfsi Coass .squsisi'-fr et ' ς ' -Yss εἴ .

' ThisAoeount given by'these two Authors, is directly opposite  
to thet given by *Pomet,* who assarts, that there is only one Be-  
soar sound, ife the Stomach of each Animal.: Tie assures us, at  
the same Tithe, that he would not dare no. contradict the Au-  
thors who have written on ’this Subject, stf he had not had in  
his Custody a Pi ece shfiinient. to justify, ins. Opinion. It will not  
be improper to inquire a Tittle more minutely into this Fact,  
fince nobody,, so her as I,know,, has. as yet.anirnadverted pub-  
linkly on-this Error os *Pamesisi,* with regard, to his pretended  
Coat oTthe animal *BeornarsiviNCffi* he affirms to .‘he one of the  
greatestCnriosstiestheVIrtuossofFrawkehayeseensora longtime.  
... IRthasPart oThisTreatise ofDrugs..which.relates tnAni-  
inals, ‘.he\*.finest .the folrowingSCeount of or.su so ' si .; - \_ -;

’ , ccr ThtS.CQat," says he,.'δ᾽ is as large -as a.Gooinss Egg, Cor

-yer'd over externally’ with "a rough, short, and yellowish-  
ic coloured Hair. IJporLeutting in,. the first thing that occurs, is  
"a thin brown Shell, which serves as a Cover to another white  
" one; asthardras,a Bone, in which ths-Stone called *Bezoar is*contained."*;se. i . api.* Tkisusl H:..v ι

Now this extraordinary Chat in which the *Bezoar* is wrapt  
Up, and winch he pretends to have discover'd, herby no means  
any Partofsihe Animal whicht produces *Bezoar,* but an  
exotic Fruit, im which either PorIMt. himselsp or seme wanton  
Impostor, by: whom he thawialldwed-thimselFto he-deceiv'd, has  
dexteroufly fitted- the *Bcusoar,* 'Tis-oaly a\* Yearssnee-I detected

this Piece- of Fraudfor when I was examining this Curiositsiof  
the late Mr.-Pourer's, along with Mr. *Faillant,* and Mr. *Da  
Jussieu,* we perceived that this pretended Coat could nor posii-  
bly he a Part of any Animal, but rather some littie known  
Fnsit; which Conjecture was afterwards confirmed by Mr.  
*Faillant,* who, happening to heve some Fruit of the same Kind,  
sound no Difficulty to make of their Coats *Bezoars* exactly like  
that foe much Valued by *Pomet.* This Fruit is. produced by **a**fort of Paim-tree, described by *John Bauhine* under the Name  
of *Palma Cuciofcrai* This Fruit is also described by *Theophra-  
stus,* and the Tree itselfgrows in *Egypt, Nubia, Rnd Elhiopias  
Cordas* calls it the *Nux Indica minor, Rud* has given the same  
Description of it which *Pomet* has given of the Coat os the *Be-  
zoar. Pomet* has omitted only one Particularity os this De-  
feription, which is the Skin which covers the Whole of the  
Fruit, and is *of* a yellow tawny Colour. - The Fruit itself has **a**Pedicle divided into six Parts, three of which are large, and  
three small. These Circumstances were sufficient to deceive  
Mr. *Pomet,* and others with him ; - but a careful Detection os  
Frauds of this Kind most contribute considerably to the Per-  
fection *of* natural- History. *-Memoirei de sc Acad. Royale de  
Sciences, A. sy si.. . . . ‘*

Mr. *Geoffroy* the younger exhibited to the Academy a *Bezoar*of a Very singular Kind. It in -a Stone irregularly round, three  
Inches and three Lines in its greatest Length, and two inches  
and’ofn half where it -is shortest.. -It weighs only five Ounces,  
and is of a greenish-yellow Colour. It was found in the-Gall-  
bladder of -a Land-tortoise in the Ifland of *Bourbon.* MI. *De  
Jussieu* has one of the same Sort, but more stat, an Inch thick,  
and as large as the Palm of a Person's Hand. They are both  
disposed in Strata like- all other *Bezoars.* From this we see,  
that stony Concretions may he formed in all the Cavities of the  
BodiesofeverySpeciesofAnimals. *Hist.dellAcad.Roy. deSciefur.*

*Schroder szys,* that *Besooars* are alexipharmio, and Promoters  
of Sweat; that they are good in Epilepsies, Palpitations os the  
Heart, Jaundice, Dysenteries, Stone, and Obstructions os **the**Menses ; as also that they cure Melancholy, and forward Deli-  
Very 7 and in these important Intentions he assigns -the Dose  
from three Grains to twelve. But we have, no Instances from  
Experience to support any such Practice. They have neither  
Sinell nor Taste ; .and upon taking into the Stomach, give **no**Sensation, nor produce the least perceivable Effect, which- is  
Ground enough to suspect them good sor nothing; although  
our Physicians prescribe them in much larger Doses .than what  
*Schroder* mentions, and others have ventur'd half a Dram or **a**Dram at a time. The Shops use it only in the *Pulvis e Chelis  
compositus,* commonly called Gascoign’s- Powder, which, tho’  
it is aedear Medicine, seems to be of no Virtue as an Alexiphar-  
Inic ; yer as it has often been Join’d in Prescription with some  
Alexipharmics os Efficacy, it has the Credit, amonost the Ig-  
norant, , of doing what it never had any Share in. *Quincy.*

Many Grcumstances contribute to render the medicinal Vir-  
tues of *Bexoar* precarious, and not easy to be. determin'd ; as  
the Uncertainty of procuring that which is genuine, it being  
much adulterated; as is-said, even in *th^Lndies,* not to mention-  
theJarge Quantities that are made in *Europe* in Imitation of the  
tithe. Again, the excessive Price it generally bears, makes it in-  
convenient toexhibit it in a great Number of Cases, ;and that in  
- sufficient Quantities, and those-long enough continu'd, to de-  
termine, whether the Virtues attributed to it are real Or imagi-  
nary ; and, without this Test, it is not possible to reason accu-  
rately and' conclusively with respect to the Efficacy of any one  
Simple, tho? the Manner of its Production, and the Analysis,  
are.both taken into Consideration ; neither does the Taste give  
.us any finer Inforination, notwithstanding the above-quoted  
Remark of *Quincy.*

*sms* to my own private Opinion, it is of no great Importance  
in the Case-before us, because I have very seldom directed it,  
and consequently am not a judge of its:real Effects: But I am  
informed, from Physicians who have industrioufly attempted to  
make the proper Experiments, thet it has no sort of medicinal  
Virtues, that they could perceive, which might give it the Pre-  
ference to the Testaceous Powders. P cannot, however, for-  
bear thinking,-that is w? had the genuine *Bezoar* Stone, we  
should find it- endowed with greater medicinal Virtues, than at  
present we have any Reason to believe it pofleffed of.

That Species *as Barco ar* call'd by the *Dutch Pedro de Porco,*.and by the *Portuguese,* who first imported it into *-Eurepc, Pc-  
deo de Fassear,.* is sound in the Gall-bladders of certain, wild  
Boars in the *Indies.* Iris not much larger span a Filbert: of a

, moderate Size, which it resembles, pretty much in Snape, tho'  
Tis-more irregular. It is not always of one and the same Co-  
lour, tho’ generally it approaches to that of *Toulon* Soap, which  
is aGreenish-white.. Its Surface is as it were polish’d, and smooth  
to the Touch. : -- - - -

When any of these *Bescoars.* are imported to *Amsterdam,*(the Number of which brought home in the richest loaded *East-  
India* ShipsTarelyexceeds fiye or six) they are purchased at three  
or sour hundred Livres each, and sometimes more; not by the  
.Merchants, with a View to prosit, but by the more opulent

Burghers, either for Presents to Persons of Distinction, **or in**order to he preserv'd as a Treasure in their Families, and handed  
down by way of an Entail to their Posterity. -

'Tis incredible whet surprising Virtues the *Indians* ascribe to  
*this Bezsar,* which is by them called *Mastica de Soho.* The  
inhabitants of the Kingdom of *Malaca,* where 'tis most com-  
monly sound, also esteem it more than the Oriental *Bexoar,*not so much because they believe it the best Preservative in the  
World against all sorts of Poisons, as because st is a sovereign  
Cure sor the *Mordexi,* a Species os Disease to which they are  
subject, and which in that Part of *Asia* is no less dangerous and  
satai than the Plague is in *Egypt.*

. The *Indians* also affirm, that this Species of *Bexoar* is an ex-  
cellent Remedy in all malignant Fevers, the Small-pox, and  
most Disorders under which Women not with Child may hep-  
pen to labour. Experience has also convinc'd them, that it  
causes Abortion when used by Women with Child. - '

The Method of using this *Bezoar* is to infuse it in a Glass of  
Water or Wine, till it has communicated a flight, though not  
a disagreeable Bitterness to the Liquor, which is to be drank  
in a Morning fasting, and on all other Occasions, when pressing  
Circumstances call for it.

. In order to facilitate the Infusion, and preserve so precious a  
Stone, most People who have it, set it in a round Box of Gold  
perforated in several Parts, to which a small Chain of the same  
Metal is fix’d, in order to suspend it in the Liquor when they  
use it. . λ . . :

The *Bezoars* taken from thePorcupineS and Apes do not differ  
from those taken from the wild Boar, except in this Circum-  
stance, that they come from different Animals ; unless with  
Mr. *Tavernier* we assert, that, these two Stones, which he calls  
*.Malaca* Stones, are not sound in the Gall-bladder of the Por-  
cupine and Ape, but in the Heads of heth these Animais ; and  
that they are *Bezoars* fo much esteemed by the Inhabitants  
os *Malaca,* that they never allow any of them to he carried out  
of their Territories, except such as they intend for Presents to  
Ambassadors', or some os the more potent *Indian* Kings. . -  
. Some assure us, that the *Bezoar* of *Siam,* so much esteemed  
sor its excellent Qualities, is a Stone taken from the Ape; and  
that it is found in *Siam as* well as in *Malaca,* in which last  
Country alone Travellers affirm’d it to he found, till Mr. *Chau-  
mont* went to *Siam* in 1686. in Quality of Embassador from  
the Court of *Frances \_ \_ . , si -*

There are several compound Substances, which are call'd  
*Bexoars,* or *Bexoartics,* the principal of which are the follow-  
ing. - ' S - ' .’ :. : ’ :  
**. BEZOAR ANIMALE-** *is thus prepared. .*

' Take of Hartshorn calcin'd to its greatest Whiteness, and  
reduced to Powder, four Ounces: Levigate it on a Mar-  
ble till it become very fine, pouring to it. Drop by Drop,  
a Quantity of the Spirit of Vitriol, sufficient to form a  
Paste, out of which form finall Balis, which are to be  
dry’d immediately. ' t

The Liver and Heart of Vipers pulveris’d is calsed also ANI-  
**MAL BEzOAR. .4. si - -**

. This Medicine is an Alexipharmic, a Sudorific, and a De-  
stroyer of Worms. It stops Fluxes, quenches Thirst, and is an  
excellent Medicine for Children. ;

**BEZOARTIcUM JovIALE** *is thus prepared.*

Take of the ReguluS of Antimony fus'd in a Crucible, three  
Ounces; to which add two Ounces *osEnglijh* Tin fus'd  
in the same manner, that a Regulus may again be pro-  
duced; then levigate the Whole, and mix with it six  
Ounces of sublimate Mercury, and distil with a Retort.  
Fix the Butter distfl’d from it, with Spirit of Nitre, by  
three Distillations. Then calcine; and when ignited, ex-  
tinguish it in Spirit of Wine, and dry it. Thus a greyish  
Powder is produced. -

This Medicine is a strong Diaphoretic, and is os singular  
Efficacy in Disorders os the Womb, and a great many other  
Distempers incident to Women ; aS also in Fevers, the Plague,  
and Scurvy. Its Dote is from three to five Grains. \

**BEZOARTICUM LUNARE**

Is prepared of Silver dissolved in Spirit of Nitre, and Butter  
*of* Antimony, by proceeding in the same manner as in the  
Preparation of the *Bezoar joviale.*

. This Medicine is a Specific in Epilepsies, Convulsions, Me-  
grims, and Apoplexies. It is Anodyne, Sudorific, and of fin-  
gular Efficacy in curing the Erysipelas. Its Dose is from **six to**twelve Grains.

**BEZOARTICUM MARTIALE**

." Is prepared of the Crocus of *Mars* dissolved with Butter of  
Antimony, fixing it as above directed in the *Bezoar Jo.,  
viale :* Or,

**It is made hy diflhlVing one Ounce of the Filings of Steel in**a suffiaent. Quantity *os Aqua. Pegla,* pouring **to** it, **by**little and little, eight Ounces of **Butter of Antimony, and**- proceeding with Spirit of Nitre, ;

This Medicine powerfully stops hepatic and **other Fluxes,**and strengthens the Viscera. Its Dose is half a Scruple.

**BEZOARTICUM MINERALE.*\ BerAar. Miner al.:***

Take of the Butter of Antimony, three Ounces ; drop upon  
it flowly aS much Spirit of Nitre ;: draw that off again in **a**Sand-heat ; which pour back again, with the Addition of  
z another Ounce of the same ; which draw again, and re-  
peat thet Operation three: or sour times. Let the remain-  
ing Matter he powdered, .and calcined for an Hour in **a**Crucible ; then edulcorate by washing, and burn upon it  
three or sour times Spirit of Wine. .-ss

. This seems to have heen originally the Contrivance Of *Crosu  
lius ;* tho' *fisucrcetan, Sennertus, Hartman,* and many other  
practical Writers, give several Procelles for its Preparation ; as  
doth also *Schroder*give one not much different from this. It-  
hath been much controverted by some, whether this is a mer-  
curial or an antimonial Medicine; but it is not of Consequence  
enough to require any Notice of the several Opinions thereupon.  
This Medicine is however of Efficacy and Use enough to tempt  
some Chymists, and such-like Artificers, who keep Medicine,  
Warehouses, to sophisticate It ; for to make it genuine will  
cost double (besides the Trouble and Danger os noxious Steams)  
of what those Impostors frequently sell it sor. Their common  
Adulteration is with half or two Thirds *of:* the *Flores Sales Am-  
moniaci.* .- .- 6 ί.

The Fumes of the first mixing are Very noxious, and therefore  
to he carefully avoided. Its Operation is by Sweat, though **it**will also sometimes purge. It is much more efficacious than the  
Antimonium Diaphoreticum, and it will eradicate eVen Lepro-  
**stes,** and the most obstinate Cases of that Kind, if rightly ma-  
naged. Some account it a Resister os Poisons, and commend it  
in pestilential Distempers. Its Dose is from ten Grains to half **a**Dram. Some calcine it in a Crucible, after it is takch out of  
the Retort. Others think it better to let that Part of; the Spirit  
*of Nitre* it holds, remain with it ; but its Operation is certainly  
inilderfor fuch Management, ἐν ... '

Lute noton the Receiver, till the Violence of the Fumes are  
Over, lest when the Fine augments its Motion, inbreak the Re-  
tort and Receiver. Do not exceed the third Degree of Fine,  
nor set it stand long after the Spirit of Nitre is drawn off, **to**preVent discolouring the Medicine. The Spirit of Nitre being  
now impregnated with common Salt which was in the Butyrum,  
is become an Aqua Regia, and will.dissolve Gold, and is Called.  
*Spiritus Nitri Bezoarticus. Quincy. — \_...*

**.BEZOARTICUM MERCURIALE»**

ῖ This is made by extracting a Tincture from the Glass made  
with *Mercurius Vita,* with Butter of Antimony,, and fix-

: ing it With Spirit ofNitre,

’ . . Ci. : *i ‘ . ' . . ’ . ’. s'..*

- It is said to he an excellent Medicine in Venereal **Dis-**orders, . ...... ;; τ , . .. : : *: -igi -.r*

**BEZOARTICUM SATURNI.**

This is prepared by extracting a Tincture from the Glass  
of Lead, (which may he obtained from Red-lead and Flints)  
with uurectify’d Butter of Antimony, and fixing it ac-  
cording to Art with Spirit ofNitre.

; This Medicine is Anti-hysteric, and of great Service in *Dis-  
orders of* the Spleen. Its Dose is six Grains.

**’ BEZOARTICUM SOLARE**

Is prepar'd Of Plates of Gold diflblV'd in *Spiritus Nitri Be-  
zoarticus,* by pouring this Solution by littie and littie up-  
on Butter os Antimony, and proceeding as above.

This Medicine is an excellent Sudorific; and of Ufe in **the***Lues Vinerea,* the Plague, the Gout, the Dropsy, Fevers, and  
Obstructions of the Spleen. Its Dose is from three to eight  
Grains. " '

**‘ - BEZOARTICUM VENERIS**

Is prepar'd, by extracting the Tincture from the Filings of  
Copper, with rectified Butter of Antimony, and fixing

.- it according to Art, with Spirit of Nitre. .

This Medicine is, by some, exhibited in Leprosies and Dif-  
eases of the Head and Brain. Its Dose is six Grains. External-  
**ly** it is of Ufe in old Ulcers, Fistulas, and Impetigos, **ifmix'd  
with some proper Ointment. *Pharmacep. Eatean,***

' SPIRITUS NITRI BEZOARTICUS is made Ivy didin-  
ling Spirit of Nitre and Butter of Antimony' together, in 2. ;  
Retort. See BEZ0ARDICUM MINESALE. . ' - -

BEZOARTICUM. Bezoartic, thet is, possessed of the

' Virtues of *Bezoar. Atexipharmic. ' ' '*

BHACTA. *Johnsen* explains this, *Terra Rubea.*

: ’ BIA, βία. Force, Violence. Hence βιαίως, violently, forci-  
bly. μ'τά βίας sometimes imports, scarcely; not without Di-

. fficulty.- *Galen. . .*

' BIARGHETNUSIM. Ceniss. *Rulandus.*

- BIBIN EI.LA, orBIPENULLA The same as *Pimpuri .  
nella,* which see. *Blancarde Ray* says, it is the *Plantago ane  
- gastiselia ferrata* of *Clastus* and *Parkinsen.*

BIBITORIUS MUSCULUS. The Adductior Oculi is  
/sometimes called by this Name. - ------ τ

BICAUDALIS MUSCULUS. The *Triceps Astris* has some-  
times heen thus called i and also *Tricandalis,* and *Intricatus.  
Castellus. - . '*

BICEPS. The Name of several Muscles, one of which is  
"called,; " - - .. \* ; ' : "

*Bieests internus Hiumeri,to dsiEnguisu it fromsue Bleeps exter-  
nus,* otherwise called *Gemellur.* See GEMELLUS. It is more  
frequently called simply *Biceps Hamere,* without the Epithet  
Of *interitus. . ~*

The *Biceps Humeri hash* two Heads or Beginnings: The  
first or outmost arifes with a long round Tendon, from the  
upper Part of the Brink of the Acetabulum Scapulae, and runs  
under the Ligament .of the Articulation, in a Sulcus or Cha-  
nel, on the Head of the Shoulder Bone, wherein it is inolo-  
‘ fed by a proper Ligament. In its Descent it begins to grow  
'fleshy, as it marches under the Termination of the Pectins] '  
Muscle, where dilating itself into a large fleshy Body, it  
joins with its .other Head or Beginning. The latter arises  
with a somewhat broad, flat, and long Tendon, at the Extre-  
mity of the Processus Caracoides Scapulae ; in its Descent'it  
strictiy adheres to the Coracobrachialis (wherefore some Au-  
thors, not rightly describing that Musole amongst those of the  
Ann, have mistaken it for a fleshy Beginning of this). But  
then parting from it, both there Heads compose a large fleshy  
Belly, which becoming tendinous, near the Cubit, is com-  
monly said to he insetted by a strong, round Tendon, to the  
Tubercle at the upper Head of the Radius. But we have  
observed this Tendon to he double, the external of which,  
ceding thin, passes obliquely over the *Museulus Pronator Radii  
Teres,* and, .Membrane-like, expanding itself, joins with the  
*Aiembrana Communis Musculorum,* which embraces all the ex-  
ternal Mufcles of the Carpus and Fingers.

\* When this Mufcle acts,- the Cubit is hended.

The double tendinous Termination of this Muscle (the’  
not taken Notice of by any Author thet we lcnow) is very  
evident, and was observed first by us, some sew Years since,  
in dissecting thefe MulcleS, in Company with out very good  
Frjand, that most indefatigable and curious Botanist MI. *Sa-  
muel Doody.* It appears immediately under the Skin, and  
' Membrana Adiposa of the Cubit.

As for the Ufe of this external Tendon, which we call  
*Fascia Tendinofa,* it seems designed, not only for the more ad-  
vantageous Elevation, or Bending of the Cubit, which it  
more easily moves, by how much the inore it recedes from  
the Centre of its Motion or Fulcimen, at the lower Part of  
the Arm-hone, and approaching to its other Extreme; but  
likewise strictiy including all the external Mufcles, whether  
belonging to the Radius, Carpus, or Fingers, it thereby cor-  
rohorates them in performing those strenuous Actions they are  
necessarily employed in. This letter use was first suggested  
to us, by observing those artificial Bandages made of Leather,  
which some laborious Mechanics make use of, by adapting  
them to the helly’d Part os the Mufcles of the Cubit, amongst  
which Turners, and especially there thet use the Rafp in  
making Frames for Cane Chairs, (as they are commonly called)  
llke a double Screw, are frequently obliged ro this Artifice.

In Phlebotomy, the Ductus of these external tendinous Fi-  
bres ought to he refpeAed, by directing the Lancet according  
to their Length, to avoid too great a Division of them, which  
is frequently the Occasion of these ill Symptoms that remain  
after that fo commonly practised Operation by bold Blond-  
letters.

An extraordinary Cafe relatiog to this Musole once hap-  
pen’d in our Practice, A Woman, three Days before she  
coofulted us, had (as she suspeoled) dislocated her Shoulder  
Bone, by wringing of Linen Cloths aster Washing, (which  
is commonly done to express the Water) adding, that in  
straining her Arm in the Action, she sensibly felt something  
(as she thought) slip out of iis Place on her Shoulder. After  
examining the Part, wo were well satisfied, that there was no  
Distocation: But observing a Depressure on the external Part  
os the *Deltcide* Musole, and finding the two insetiot Tendons  
of this Biceps rigid, and the Cubit thereby denied its due Ex-  
tension, we stsspectsd that the external tendinous Beginning  
(before taken Notice Of) was flipt out of its Chanel in the

-OS Humeri; but finding the Part at that time somewhat ini.  
flamed, she having not long hefore made use,'of it, we ad-  
vised her toan emollient Application, and to give it Rest, till  
’ the next Morning ; at which time we found our Gonjectirre  
true, and, by turning the whole Arm to and fro, it readilystipt  
into its Place, the recovering the Use of the Part immediately.

Biceps **FEMORIs. : -**

The *Biceps Femoris* has two Heads, the . superior and the  
longest of which arises with a round Tendon from the Protu-  
herance ofthe Ischium, in its Descent hecomes large and  
fleshy, and, in above half its Progress, lessens itself again,  
where it is joined with its other Head, havings broad, part-  
ly tendinous, and partly fleshy Beginning from thelainea Aspe-  
ra of the Os Femoris, immediately below the Termination  
Of the *Gluraus Maximus*; it being thus united, grows ten-  
dinous, as it marches in a' Chanel on the external Appendix  
of the Os Femoris, becoming perfectiy tendinous at its Im-  
perntation into the superior Epiphysis of the Fibula.

Besides the Office commonly assigned to thisMusole in hend-  
ing the Tibia, together with the *Sartorius* and *Membranesius,*it is likewise employed in tuming the Leg together with the  
Foot and Toes outwards, when we sit with the Knees bended.

*' Cowpers Myotomia Reformata. - -*

BICHICHIAE. An Epithet of certain Pedinral, or ra-  
ther Troches, describe Sy *Rbnsces,* .consisting of the Juice of  
Liquorice, Sugar, Starch, Grain Tragacanth, and blanch’d  
Almonds. *Dastellia. - - -*

BICONGIUS. Two Gallons. It contains twelve *Sextariii  
Castellus, -*

BICORNE OS. A Name for the *Os Hiyoides.* See  
HyoID Es; .

. BICORNIS MUSCULUS. A Name for the Exrrascr  
*Carpi Radialis.*

BICUCULLATA *Carmdense radite tuberose sandmans.*This is a Name given by Mr; *Marchant* to the *Furnaria  
ruherofa instpida Cornuti,* of which *Marchant* makes a new  
Genus of Plants, because it differs from the other *Fumaria,*principally with respeit hi the Structure of the Flower. *Mem.  
de stAcaaem. Roy.* I733.

BIDENS, Offic. *Bidens, Verbastna,* Mont. 38. *Bidens,  
foliis tripartito divests,* Tourn. Insi. 462. Elem. Bot. 367;  
Herb. Par. 6O. Boerh. Ind. A. I22. Bust. 39. *Verbestna,Dw.*Cat. 166. *Verbesina Jive Cannabina aquatica, store minus gul-  
chro, elatior ac magis frequens,* L B. 2. Io73. *Cannabina aqua.,  
tica, folio tripartito divise, C.* B. 32I; *Eupatoriam aquaticum  
farnina,* GeI. Emac. 7 II. Raii Hisp I. 36o. Synop. 93. *Eu..  
patoriurn aquaticum alterum.* Park. 596. *Chrysanthemum Can-  
nabinum Bidens, folio quinquepartito, Jive vulgare.* Hist. Oxon.  
3. I7. *Chrysanthemum aquaticum,folio tripartito divise,* Herm.  
Flor. 2. 47. *Caratacephalus vulgaris.triptcris et pentapterisfo-  
lio,* Acti Reg. Par. A. I72O. c 327. WATERHEMP  
AGRIMONY. It grows in watery Places, and flowers in  
*August.* The Herb is in Use. It is hepatic and vulnerary.  
*Dale.*

BIFIDUS. Forked. *Spine Biscda* is a Name apply’d in  
the *Acta Eruditorum,* to certain Tumors at the Spinal Pro-  
cesses of the Vertebrae of the Back, in new-born Children.’  
*Castellus.*

BIFOLIUM, Offic. *Bifolium selvestre vulgare.* ORDI-  
NARY WOOD BIFO1L, or TWAYBLADEr Park;  
Treat. 5o4. *Bisalium majus vulgare.* Hist. Oxon. 3; 489. *Bi.,  
folium majus, feu Ophris mojcr quibufdam,* J. B. 3. 533. Rail  
Hist. 2. I232; Synop; 3. 385. *Bisalium vulgareselvestre. Jive  
' Ophris.* Mer. Pin. I5. *Opsone,* Cheb. 506: Merc. Bot. 1.54.  
Phyt. Brit. 82. *Ophris biselia,* C. Β. Pin.-87. Tourn. Inst.  
437. Elem. Bot. 246: Boerh. Ind; A. 2. I54. Ger. 326.  
Emac. 403. Buxb.- 239. Dill. Cat. Gist: 75. *Ophrys five  
Ophris,* Rupp. Flor. Jen: 238. *Orcfiis bifolia, herbaceo sure,  
major,* Herm. Cat. Hort. Lugd: Bat. 461: TWAYBLADR

This Herb has a stender Root, with many Fibres ; from  
which springs a round Stalk a Foot high, or somewhat more,  
single, and not branched ; about the middle of which grow  
two large oval Leaves, mil of Nerves, somewhat pointed, and  
in Shape like the broad Plantain, on very short Foot-stallts.  
The Flowers grow in Spikes at the Top, like an Orchis, of  
a dull-green Colour, having no Spurs or Heels, and of a  
‘ roundish Figure. It grows in Woods and Thickets, and in  
moist Meadows, particularly in *Battersea* Meadow, near the  
*- Thames,.* and flowers in *June. ------*

*Twayblade* is astringent and agglutinating, good to corn  
solidate Ruptures, and heal Wounds, tho’ it is hut seldom  
used. *Miller's Bot. Offic.*

BIFURCATUS. The same as *Bifidus,* forked.  
BIGNONIA.

MI. *Tournofcrt* called this Plant *Bignonia,* in Memory of  
the Abbe *Bignrn,* Librarian to *Lemis* XIV. King of *France,*he being a great Encourager of Learning. *The Trumpet Fsqueer,  
or Scarlet JeJscarnine. .*

The Characters are-; ,

It hath a tubulous Flower, .consisting of one Leaf, which  
; Opens an the Top. like two Lips : These Flowers are succeeded  
i by-Pods, which are divided inth two .Celis, and contain seve-  
.ral..wing'd Seeds. . .? . '

There are eleVen.Specles -os .this Plant.

\* I dots’t know of any Medicinal Virtues Attributed to It.  
*Miller\* s Dictionary... ’ . :*

.:. BiHAI... ...r .., . ... .....

.. Thisds the *AmocicariNntxae* of.a Plant, τ

. /.The Characters are;- /ῖδ᾽.τ " ; ' . T?..’

It hath a Yuhulous Flower, consisting. of one Leaf, shaped  
.almost like ..a Lily, and cut into two Parts s thePointal and  
. Stamina are included in two Leaves. The Pointal afterwards  
. becomes a. fleshy three corner’d Fruit, containing three hard  
.rough Seeds.: To thefe Notes should he added,, many Flowers  
..contained in a common Covering. ἐν’

There are two Species os this Plant.

II don’t I know os any Medicinal Virtues attributed to it.  
*^AAillersis Dictionary. ' so . ~*

BILADEN. . Steel, or rather Iron; for Steel in Medicine

. signifies Iron. *Rulandus. " ' . -*

sc. -BSLIMBI. ' The Name of a small Tree about eight or ten  
Foot high, call'd by *Bontius.Pilling-bing,* and by *European  
Dotatifoe-Mdlus Indica, ..fructu.apentagono. -so -*

-so It is coininonly cultivated in Gardens in *Malabar,* and  
\ bears Flowers and Fruit all rhe Year round, being fruitful  
from the first Year os its planting to the fifteenth, and. longer.

*- The* Juice of the. Root, drank; allays a feverish Heat. A  
Cataplasm is made of tho bruised Leaves, with an Infusion of  
Rices, .which powersnlly mollifies and resolves all Sorts of Tu-  
mors. The Leaves, boiled or macerated in an Infusion of  
Rice,- make .an excellent Vuinerary Decoction. The Juice  
expressed from the Fruit cures Itchings, Impetigo, Psora, and  
.other..like-cutaneous Affections, if Linen Cloths he wetted  
..therein, and now-and-thed. applied. The same drank with  
..burnt Arrack cures the Gripes, and stops a Diarrhoea. Of  
.the bruised Leaves, with the Juice of the Flowers of the  
Palm-tree, is prepared a Cataplasm, which cures all Kinds  
os inflammations. Of the dry so FrnitS, and the bruised Leaves  
. of Betel,..they make a Powder, which drank in burnt Arrack  
promotes Delivery, and expels the dead Foetus and Secundines.

The ripe Prints are eaten for then Delinioushess, but the  
unripe are preserved with Sugar, or in Pickle find Vinegar.

*Pontius* also telis us, that he used to make a Syrup of the  
.Juice.thereof, which he prescrib’d in a hotDistemperature *of*...the Liver, and an inflammatory State of the Blood. ‘ We  
..make use of the same, he says, in a Decoction with Rice  
undecorticated, which we call *Pada,* as an excedent Medicine  
in burning and continual Fevers; for it very much contributes  
.to the quenching, of Thirst, and checks the Effervescence of  
- theBile. . \ su" . S ῖ st” .

'.. There is another Species os this Tree, whichis called *Nebi-  
pouli,* or *BHindi altera minor,* H. M.

*Os* this there are two Kinds, or rather Sexes, one os winch,  
. tho? it .flowers, nerer bears any Fruit, and is called by the  
. peculiar Name of *Ala-pouli. ....... .*

It grows every-where in *Malabar,,* and in. many other  
Parts; " . Y . Τ

... The Root of. this Tree .bruised with the Seeds of Mustard  
and Cumin, and taken, dexcites Vomiting, and loosens the  
.Belly ; but if it be used with the Fruit.*Tomara-tonga,* it re-  
strains an immoderate Flux of.the Belly, and cures a Dyspnoea.  
A Decoction of’the Leaves in common Water excites Sweat,  
.and expels the Small-pox. The same .with *Malabartitn* Saf-

fron, which the Natives call *Manya Cavas,* snakes a Bath,  
which is of great Efficacy, in all Pains of the Limbs. The  
' Fruit is highly refrigerant, and therefore extremely proper to  
allay a Violent.Thirst in a continual Fever. *Rail Hist. Plant.*. BILIS. The Bile or Gall. ..

Few Subjects have been more copioufly treated of than the  
\* Bile, both by the Antient and Modern Writers in Medicine;  
and it must he confessed, that Very few so much deserve it,  
.or are of equal importance. I shall therefore endeavour  
.to give a general Idea cs the Notions entertain’d by the  
' Antients, concerning the different Species of Bile; more with  
Sa View of rendering their Writings easily intelligible,  
. than of explaining the true Nature os tins Fluid, the Genera-  
-tion and Uses of which must he learned from the Moderns,  
who have with greater Accuracy, and more intelligibly, treated  
inis Subject. .. .. .

*Bilis,* Xnceh in *Hippocrates,* .when put absolutely, and with-  
out an Epithet, signifies pale or yellow Pile, as *Galen* in many  
Places assures us ; as in his Com. 3. on the .Book De *Rat.  
Vict. in Morb. acut.* ἔιθισται γὰρ τοῖς ἰατροῖς χολὴν μέν ἁπλῶς  
'.ὁνομὲνζεικτὴν ῶχρἀρ τεκαὶ ξανθἤν, τὴν μέλμααν δἐ χοιάν ὅλον τοῦτο  
,λέγειν.οῦχ ἁπλῶς χολὴν\* " Physicians usually call pale or yel-  
" low Bile, simply Bile ; hut black Bile they express in so  
" many Words, not simply, or by the Name of Bile only."  
And *Com.* 4. *ole* δ’ οταν, &c. " We said before,'that Bile sim-

" ply said, signifies *Fitter Bile”* Andr in his Comment On **the**..thirty-second Aphorism of the Seventh Book, ™ δεχολῶδος,  
~&c. " Bile is always the Cause of achte Dissusesssfor, .as we  
" said, by this Name the antient Physicians usually called **a**

bitter bilious Humour, and they never expresssshe mdinn-  
" choly Humour without an Epithet, not calling it simply  
J6 *Bile,* as they *do yellow Bile,* hut *black Bile.gr'* ..Againin his.  
.first Comment on the Book *de Natura Humana, i floc ar* ἰάτ ρῶν  
ἔίος, &c. "Itis customary not only for Physicians, hut\*  
" withall the *Greeks,* to say *Bile,* without any Addition,  
\_ when they intend to signify *pale, . or yellow Bile.,* Tor both  
" these Epithets are apply'd to sone kind of Humour, .differing  
" in respect of Moisture and Dryness; but all the other  
. " Biles are expressed with some Addition, aS *lsusaruginous,*

*black, red, porraceous.gr* And in another Passage of the  
Maine Comment, he says, it was usual for, the *Greeks*Io call  
*yellow Bile,* simply *Bile,* but never intended black'Bile with-  
’ out mentioningits Epithet. The same Author, in his Book of  
preternatural Tumors, says, " A Custom has'.obtained, I  
' " know not how, among us Physicians, when we *fry Pile*." simply, or the bilious Humour,.we are understood to mean  
" the pale or bitter.Bile, not the acid and black Son, which  
" we never mention without an Addition, connecting st-with  
" its Colour.'' Once more, and very fully, in his fifth.

. Comment on the sixth of the Epidemics, where he. enume-  
. rates the Various Species of Bile, χλωρὰς ουν γλώττας ἔιρηκεν,  
&c. "He *{Hippocrates)* \_ says *pale Tongues,* according to the

. " Vulgar Way of speaking, as when we .say, that, we saw  
.some *latite, pale,* whofe Colour has been alter'd in, a more  
" bilious Hue, or to that *uipale* Bile. For this we express  
" simply by the Term *Bile,* not as we do the other Kinds,  
ie with an Addition of Epithets,. aS *black, aruginous, rid,*

*yellow,* or *vitelline.* Now the yellow Bile is next so the  
‘c pale, and almost of the same Kind ; and the pale .Bile we  
. ci commonly express without its Epithet, as when we say, the  
" Man Vomited Bile ; but the yellow Bile is but seldom ex-  
. " pressed absolutely, for we immediately subjoin its Epithet,  
" saying, the Man Vomited yellow Bile, or pure . Bile. But  
" neither Physician, nor any os the Vulgar, did eVer express  
" aeruginous or' black Bile without an Addition; nor yet .the  
iC glastine, (bluish) porraceous, or Vitelline. These: Names  
" are given by some Physicians to;the different sorts os Bile,  
" and are taken from their Colours.; .so also they call by the  
66 Name of red Bile, the Serum of rhe. Blood I shut the. Vitel-  
" line is .the yellow Bile incrastated, as. the pale Bile in the  
. " same diluted with a watry Substance." This *pale* Bile,

*Hippocrates* in the Place above reserr’d to, which is *‘A.ph.* I 3.  
*Sect.* 5. *lib. b.Epid. lens,* "Isgenerated osFat,"\*fe δἐχυλῶδες  
. ἐκ πίονος. . . . . .

The Terms χβλῶδες, and χολώδη also, in *Hippocrates,*simply used imply pale or yellow. Bile, as *Galen* writes in this  
fourth Comment on the sixth .Boolc of the Epidemics, λέλεκται  
. .δ' idin πολλάκιό, *See. Ci* We have often observed, that when  
" he *{Hippocrates} lens* simply *bilious* (χ’λώδ«), he intends  
pale or yellow Bile, since to other kinds of Bile he attri-  
. (( butes their several Colours; thus we find in him, that  
1 " aeruginous, and reddish, and black, and dark-Colou?d Bile  
. “ are .Vomited.'’. . Again, *Corn.su. in lib.* 3. *Epid. . Ci* 'Tis  
" probable, says he, that she, Voided pure bilious Matter  
tc (Ζ^άδητι that is, either yellow or red; for It is usual with  
" him, as well as other Physicians,, to express the black and  
. " aeruginous, with an Addition os their proper Colour. We  
, . " also commonly say, such a one voided bilious. Matter, mean-  
ie tng yellow Bile; for we do not call aeruginous, or black

Excrements, or those os any other Colour simply *bilious,*but with an Addition of their proper Colour. And this  
Custom has universally prevailed, because pale and. yellow  
" Bile are every Day Voided both by Stool and Vomit, not  
" only by sick Persons, but by those in Health, but seldom  
Ci any other sorts of Bile, and never but by such as labour  
ί ‘6 under some morbous Affections.'' So. also χολὴ ξανθὴ is  
. called by *Hippocrates,Lib.xapi* ἀρχ. ίητρ. *m-tzposes,* that is. Bitterness,  
or a bitter sort of Humour; and all Fevers are said to arise  
from Bile, *Lib. An de Morb.* and *Lib. 2. de Nat. Humana,* and  
*in Aph.* 42. *lib. y.* in which he comprehends all putrid Fevers.

χολἡ is also pretty often simply used by *Hippocrates,* to signify  
a Flux of Bile; and, in *Lib. de Lac. in Horn,* for any Defluxion  
..in general, which arises from a thin Humour lodged in any  
Part, and by its Nature easily disturb'd, and put in Motion ;  
and he often uses the Word in this Sense throughout the Book,  
as, for Instance: Ὠς τὰ πολλὰ ἔμπυοι γἐνονται οταν ρεῦμα ἐς τὸ  
ἀυτὸ ῶσπερ ἐν τῇος χολῇριν γένηται, ἀλλὰ τῇσι μἐν χολξυν πολὑ  
.ἀποῤῥεῖ. " An Empyema, for the most part, happens when **a**" Rheum fells upon the Part, as is the Case in bilious Deflu-

. " xions, which carry with them Plenty of Matter."

BILIS ATRA, χολἤ μέλαινα. Black Bile, or Melancholy,  
is almost constantly mention'd with its Epithet, and has a two-  
fold Origin; one from the thicker, and, as.it were, muddy  
Part of the Blood, and this is properly call'd the melancholy  
Humour X Its other Origin is from yellow Bile, too much eon-

ooctedtandheated--... This appears :to heTrtSncess Opinion, in  
many Places of his Works.saSTin this sixth Comment on the  
shuh:Bo0in of *tsm.Epidemics,.* and. Qn *Aphorism.*'-.the .twenty-first  
of thetlurdBook; and his Coininent on. the Boink *de Pat. Vict.  
in.Morb.acut.* And inhisiCornment on the fifty-third *Aphorism*os the sixth Book, he says, μεμίῦΐισιά so χρἤ *aesi guleiius pezhau-  
yna* χολῆς dur .ἄλλοις,.διωοεσμένων, .άςγ *.etc.. u* The Reader ought

to .call-to -mind, -nay Definitions concerning black Bile in other  
sfePlaces*os .my* Works, hows that one Sort proceeds froth  
am. yellow [Pile, .«.too ..much tofreIy’d ζὑπἐροπτηθεἴσης] 7 and  
- " -this is rhe worst of all. Another Sort arises froth the Mud,  
" if I may so say,'and Dregs of the BloodssThis, indeed, is  
" os a thicker Substance than thesortner, but is far less malign  
" .nant'ini^tiality.. We told you .also,, that titeEile, which is  
" a sort os Lees, os the Blood, ought not, as yet, in Accuracy  
" of.Speech,jto he call’d black Bile, but amelancholy Humour;  
" but; by an Abuse or Names, we sometimes hell it black  
" Bile, heeausesss it he not jeVacuated In a littie time, it. will  
" he really fuch." *Fessius.* I -- . ’ ‘si ‘ / . .  
. Χολὴν μέλαινα, brack Bile, in the common Acceptation, signi-  
z fies any thick .and -black Humour, whether It he the -muddy  
Part os the Blood,. or Blood adust. Or Bile. Torrefy'd beyond  
measure, or however, gen erased. Put this Appellation properly  
belongs to:a Humour render'd,...by Adustion, preternaturally  
mordacious, acid, harsh, splendid, corroding,, and malignant,

\* which, pout'd on the Ground, bubbles up, and raises the  
Earth, after the manner of Ferment or Vinegar; is the Cause  
of incurable Ulcers ; and dash nauseous, that neither Fly, nor  
Mouse,. Isor any other Animal, .will taste it. Issis generated  
.two Ways; first, and principally, from .a black and feculent  
Humour, winch is heyond .meaiure putrid, .and adust ; the  
other Kind is from yellow Bile, Vehemently adust, , and is by  
her the more.malignant.Sort, ..as yellow. Bile itself Jis more ma-

- lignant than the melancholy Humour or Dregs os the Blood.  
Sometimes in proceeds, by Adustion, from vitelline Bile : Such  
an Alteration in the Bile is produced hy a preternatural Heat  
and Putrefaction, by which in acquires, an,Acrimony, and is  
renderin like Ashes; just as.the Lees of Wine, which are cold  
and dry before they, are burnt,‘hut asterwards become so hot aS  
to burn the Flesh,: and\_ produce a ColliqUation and; Putrefaction  
therein.. ’ *Cason* has told us, that he never observed an Excre-

- lion os this land os Bile without pernicinus Consequences. . Such  
μέλαινα χολὴ, strictly speaking, is :manisestly distinct, ἀπὸ sa  
μελαγχολικοῦ χυμοῦ ἥ μέλανος, " from The melancholy or black  
" Humour.” For thin latter is reckon'd among the Elements  
of .the Body, and contributes, together with the Blood with  
which it is mix’d, to the Generation and Nutrition of the Ani-  
Inal, having nothing of an acrimonious or corroding Quality;  
but being, as I may say, the Mud or Sediment os the Blood,  
answers to the Lees of .thick Wines. This Humour the Spleen  
attracts to itself, purging it from the Liver and Blood, and ap-  
propriates it,- when alter'd, to its oyvn Nourishment, expelling  
-the Reliques, with other excrementitious Juices, into the Sto-  
mach, in order for Evacuation. The Excretion of this black  
Humour, whether by Stool or Vomit, is often healthful, signi-

, fying, that.theBody is in a right Temperament, and chat vigor-  
OUS Nature, heing oppress'd with too great a Plenty, finds a  
Way to ease itself of its.Burden: But is it he retain'd too  
long in the Body, without heing evacuated by some sensible or  
occult Passage, it oppresses and debilitates the Liver, undergoes  
Alteration and Putrefaction, is render'd adust by some febrile  
Inflammation, .and perfectly becomes .that black Bile hesore  
spoken of. ‘ - dur.

*Xofai pesuettra. also, in Athenaus,* passes under the Appellation  
of χυμὸς ξυστικός, " the corroding Humour.; " so it is call'd  
there by one *Trapehorethor*; .and *Galen* assures us, that some  
gave it that Name, where, speaking of black Bile, he says,  
όνομα ὸυδἐν ιδιοντω τοιιοτῳ χυμῳ, πλῆν ἔιπη τινος ἥ ξυστικὸν ἢ  
ῤξώδη κεκληκαοιν αυτην\* 66 This kind of Humour has no peculiar  
" Name, except that there, are some who have call'd it the  
*" corroding* or vinegar-like Humour."

Κολὴ also signifies τό χοληδοχον ἀγγεῖον, " the Vestel con-  
" raining the Bile,” *Pollux, Lib.* 2. and is sometimes used for

- the black Liquor of the Cuttle-fish.

*Bilis, Pel,* χολὴν is that Humour in the human Body, which  
is distinguished by its Hear and Dryness. This is two-fold ; one  
natural, which is cased simply *Bile,* χολἤ\* the other trans-  
gressing the Bounds of Nature. The natural Bile, which is  
mix'd with the Blood, contributes towards nourishing the Body:  
It is of a yellow or palish Colour, of a bitter Taste, thin Con-  
distance, like the Flower of Wine, and of a . heating and drying  
Virtue./ The. Substance of thin Humour is contain'd, at first,  
in the Meat and Drink ; which being concocted, the well-  
disposed Part of the Bile is converted, together with the Blood,  
into Nourishment for the Body; hut what is -excrementitious  
finds a Receptacle in the Gall-bladder. For, as from new Wine,  
white under Fermentation and Changing, two Rinds of excre-  
.mentitious Substances are separated by virtue-os its Heat during  
thet Alteration, one lighter and more airy, which they call the  
Flower , the other. heavier, and os a more earthy Quality,

which they eallrthe Lees;-so from the Food are produced yel-  
low Bile, of a thin Consistence; and black Brie, which is ofai  
more denfe and gross Contexture.. But all the natural Bile,  
thet is,in us, does not proceed from the Aliments; for the  
Neat of the Liver and Veins,'is alittle exalted above the com-  
mon .Standard, sometimes converts the thinner Part of the pure  
Blood into yellow .Bile. For asCholer- proceeds from a weak  
Heat, -Blood froth *a* moderate Heat, so, from an immoderate  
Degree os the -same,, is Bilegenerated^'which is endued with  
the Qualities aboye-inention'd, and so familiar to our Nature;  
as. to. he accounted among the Elements os oimBed.y. .. Burthe  
Bile, which is above, or below the natural Standard, is nolonger  
ealpd IimplyDile, but has an Epithet .denoting its bad. Quality-  
and there are a Multitude of these viciousBiles,ras. theExcess of  
Heat, .and other Qualities, will admit of a great Latitude ; but  
almost all the Differences, taken Notice of, by physicians, thor-  
row their. Name from, their Colour, or Consistence.. Thus,' '  
. Ἐρυθρά, the Red. This is either fin acrimonious, and mor-  
dacious Serum of the Flood, or comes very near, in Consist-  
ence, to a thin Blood Yhet because it-does not concrete, like  
Blood, after Effusion, 'it is-call'd *Biles"* so - - . τχ

-Ίσμτώδηῆς the-Glastine;.or what, by its Colour; .resembles  
that os *Glastum, TVioad*; hut is indeed^ darker, and .nearest the  
Colour, of Cabbage. This Bile is extremely acrimonious, hot,  
and pungent, and next To black Bile in Consistence, Colour,  
-and Efficacy. It is the most malignant among all the kinds of  
Bile, and is generated in the Stomach, or adjacent Parts, thy. a  
very vehement and burning’Heat..' ' '

'Ἰώδης, the jTruginous, or what is osi the Colour of Verde-  
grise, 'that-is, green.. ' It is acrimonious,, hot, and pungent .to '  
agreat Degree, and next to the Ἱσατώ *ins,* butnot yet arrived  
to that Height of Malignity. It is generated in the Stomach,  
hr in the Liver affected with a Phlegmon, ί .' 4

". Κυανέη ἤ κυανίζουσα, she Azure or Sky-corour'd. This seems  
to be the same with thelsatodes.; for the Isatis, or Glastum, is  
of this Colour.. / .Y ' r ...... ς" I. ς ..

Ἀεκιθώδης, the Vitelline; that, is, in Colour and Consistence,  
resembling the Yolk of a Taw Egg.. This Kind is os a gross  
Substance, and os a high yellow Colour. It comes of yellow  
Bile, too much concocted, and dried , hy an immoderate Heat, .  
and, for that Reason, afterwards -condensing: It nearly holds  
the middle Place between the natural Bile, and what is arrived  
at the highest Degree os Malignity. It is generated in the Ves-  
sels, as *Galen* writes in his Book *de atra Bile,* tho' it . is often  
Voided both by Stool and Vomit. - . I

Ἀανθἤ, the Yellow. This comes nearest to the natural Bile,  
which ought to be aMedium between the pale Bile and the yellowi ,

Ὁρφνώδος, the Dark, or Obscure. This Epithet is used by  
*Galen,* in. his fourth Comment on the sixth Book of the *Epide-  
mics.* He seems to mean by it τὴν κυἄνέηνκαὶ τὴν ἰσατώδο. - νύ

Πρασοείδὴς ἤ πρασώδοις, the Porraceous. This is often gene- .  
rated in the Stomach, from indigested \_ Food ; and sometimes  
from a Disease, or preternatural Heat, in the Veins, whence it  
is convey’d into the Stomach and Intestines. But it .is not pro-  
duced by a vehement Heat, like the ἰώδης ; for tho' both Sorts  
are green, the ἰώδης, on account os a more vehement.Heat, is  
inore acrimonious, mordacious, and os a thicker Consistence ;  
which Qualities belong to the πρασώδης, hut in a much inferior  
Degree. *Galen,* in his third Book *de Aliments Facult.* writes,  
that, in severe Distempers, all sorts *ess Bile* are Voided, except  
the porraceous; hut that the yellow, and the pale, and the  
porraceous also, are often voided, both upward and downward,  
by Persons in Health; which is a Proof, that the porraceous  
differs from the aeruginous, aS to Excess of Heat.

*Πνῤῥὰ,* which proceeds from a less intense Degree os Heat  
than the yellow. This Colour is a Medium hetween a pale  
and a yellow; therefore this and the yellow Bile have their  
Names often confounded, on account os the Nearness os their  
Colours, as *Galen* telis us. *Lib.* I. *de Crisibus, C. iL.*

' SYet, the Liquidthat is, diluted with Serum, or some  
other Humous,

ὙδατώΛης, the Watery. This is the same as the ὑγραί..

. Ὕ-πέρυθρας, Reddish, consisting of the Serum of Blood, or  
the thinner Part of it,’ mix'd with another Substance of a dint  
ferent Colour from Blood. ... " ’

Φαιά, Brown. The same with the ὸρφνώδης and κυανέη.

Χλωρατε Green or Pale ; for τὸ χλωρὶν signifies both, as  
*Galen,*.in many Places, has observed; but what is. properly  
green, has a Tincture of the Pale and Yellow. .

. ) Ὄχρα, the Pale. This is the most moderate os all the Rinds,  
and least hot.. It is hitter and pungent, and generated within  
.theMeins of. a Body in its natural State. It is of a humid.Qpa-  
.lity, and but littie inclining to the Yellow, because it is mix'd  
.with some thin pituitous or aqueous excrementitious Humour.  
This Sort Is more frequently understood hy the simple Name of  
Bile, than .the Yellow, as implying, a less Excess *of Heat,*which is always contrary to Nature. *Gorraus.*

The natural Heat is diffused thro' all Parts of she Body for  
the sake of Concoction; and there is, in all Parts, a Genera-  
tion and Separation, of Humours, hut by different VVays,. and

fuch as are proper to each-Part. Thus the Flesh creates and  
separates Sweat; the Eye, Tears; the Joints and Nostriis,  
Mucus; the Ears, Ear-wax. Therefore, if the natural Heat  
he incapacitated to perform its several Functions, it becomes  
acrimonious and fiery, and all the Humidities are changed into  
Bile; for Things become hitter, and infected with Bile,'by  
means of the Heat. If this Indigestion happens in the Blood,  
it turns bilious, and disperses the Infection, with its Nutri-  
fnens, into all Parts; for which Reason its Effects are univer-  
sal, and Bile is every-where Visible. ’

One Species of Bile is of a yellow Colour, subtile, transpa-  
rent, and of a finer Sort than what inclines to liVid or black:  
Whet is of a deeper Colour, like that os Saffron, or the Yolk  
**of .an** Egg, is accounted of the same Kind.

A second Species os Bile is of a darker Colour, resembling  
that of a Leek or Woad, black.

Between these are an infinite Variety of Colours, which de-  
pend upon the Heat and Humours. The Viscera also are a  
Cause Of this Diversity, as the Liver, if the Bile be yellow;  
the Spleen, if it he livid. *Aretaus, resoci. dll.* καὶ σημ. χρον. παθ.  
*Lib.* i. Cap. I5.

If an Inflammation proceeds from an Influx of Bile, the  
Intention is commonly directed to the Evacuation of the pec-  
**tant** Matter; both by Vomit arid Stool. For this End, some  
CholagogueS are to be prescribed which work both Ways, such  
as the Thlaspi; for an Acetabulum of this Plant, which is the  
greatest Dofe, evacuates Bile both upwards and downwards.  
Also Medicines prepared with Scammony work upon and  
purge yellow Bile. We must, therefore, not make the least  
Scruple to administer a Purge, and repeat the fame, if need he;  
for the Disease immediately submits to EVacuants. If the Pa-  
tient, for some Reason or other, be either unwilling or unable  
to take a Purge, it will be proper to apply fuch Things to the  
Navel as will work upon and evacuate the Belly; or, tp pro-  
duce the same Effect by means of Suppositories, let a Clyster  
also be given, and Cataplasms apply'd, consisting of the Meal of  
Barley and Beans, with recent and unsalted Swine's Fat, and  
the fine Flour of Chamomile, and Water. But theso Things  
, are to he applied last of all; for, in the Beginning to the Height  
of the Distemper, we are to make use of Remedies composed  
os Houseleek; fresh Roses, Perdicium, Alkanet, Sanguinaria,  
Pellitbry os the Wall, Sideritis, Purflain, sharp-pointed Dock,  
Atriplex, Nightshade, Plantain, Henbane, Water-lentiis, and  
Seagreen, Elites, Lettuce, Succory, Garden-mallow, Raspings  
of Gourds, Navelwort, Violets, and Rinds of Pom grana tes.  
Every One of these, applied with Bread of the Meal of Polenta,  
removes the Pain; but especially the Seed of Fleawort, mace-  
**rated in** boiling-hot Water, and, after it is reduced to a Muci-  
age, applied by way os Cataplasm. An Ointment of Litharge  
is also Very proper to repress the Influx of Blood; so also are  
\* Apples, applied with Crums of Bread, and such-like Things.  
Cerates composed of Wax, Chamomile, and Oil of Roses,  
with the Juice of one or other of the besore-mention’d Refri-  
gerants, and the White of an Egg, and Water, with a littie  
Vinegar, are of Service. Cerate of Oil of Roses, with a suffi-  
cient Quantity of the Juice of Beet, is an excellent Medicine.  
I have seen a Person labouring under this Disorder, who found  
wonderful Relief by putting his Feet into cold Water, and  
keeping them there awhile. Another I heve seen, who made  
use of the Flesh of Oysters, with Litharge, Leaves of Henbane,  
and old Oil, carefully pounded together; and by Anointings,  
and Applications, made of the same, was very well restor'd,  
in want of Oysters, we may use River Shell-fish. These Re-  
medies are sufficiens, if the Inflammation and Heat are but  
moderate; but if they are excessive, we must manage the Cure  
as for an Erysipelas; that is, with the Leaves of Hemlock, Pop-  
**S,** Mandrake, and Henbane, and Narcotics composed *of  
pinna,* and such-like Things. But, in the Use of these Medi-  
cines, our Intention is only to allay the immoderate Heat, which  
is often accomplish'd in an Hour; 'aster which the stupesactive  
Medicine must he removed, and a Cataplasm of Bean-meal,  
Fat, and Water, he applied. For if those Vehement Refrige-  
rants continue longer on the Part, they induce a Stupor, and **a**Deadness or Duiness of Sensation: Wherefore when we are  
obliged, under acute Pains, to have recourse to Narcotics, **we**take cute afterwards to revive and cherish the Parts by heating  
Medicines. *Actius, Tetrab.* 3. *Serm.* 4 *Cap.* 28.

. The Bile as the hottest of all the Humours of an Animal,  
but differs in Degrees of Heat, according to its Colour; for  
the yellow Bile is hotter than tho pale, and the aeruginous than  
the yellow. It Varies also ut different Animais; so the Bile,  
or Gall, of a Swine is the weakest *of* all, and even cures Ulcers  
in the Ears, without shewing any pungent Quality. The Bile  
.of a Sheep is more acrimonious than the Swine's; and the  
Goat's, than that of the Sheep. The Bile of a Bull is stronger  
than the foregoing, but weaker than that of the Hyena, winch  
is yet surpass'd by those of the Callionymus and Scorpion Fish,  
winch help Cataracts, Dimness of Sighs, and an Albugo.  
The same Virtue belongs to the Bile of thc Sea-tortoise ; and  
the Bile of the wild Goat is said to he good in a NyctalopS.

The Bile of volatile Animais is more acrimonious and drying  
than that of Quadrupeds ; and among them the Bile of Cocks  
and Partridges is accounted the best: Those of the Hawk and  
Eagle have more of a kind of Acrimony, and are corrosive;  
them Colour is aeruginous, and sometimes blacjk. - Ρ. *AEgineta,  
Lib. fa Cap.* 3.

Yellow Bile is a bitter and yellow Excrement; porraceous  
Bile is acrimonious and greenish ; aeruginous, or rather Violet-  
colour'd (ἰώδης) Bile is highly pure and unmix'd ; black Bile  
is the thick Sediment of Blood: Some call black Blood by the  
Appellation of black Bile. *Raffus Ephesius, Lip.* i. *Cap.*3Ἀ

I now proceed to the modern Accounts os the Bile.

It is a just Observation made by *Hippocrates, That w are  
disorderd and render'd sicle, by means of those vcryThings vvhich  
are immediately necejsiary to Life and Health.* Whet we call  
the Non-naturais, afford a palpable, but melancholy Proof of  
the Truth of this Assertion ; for as Ain, Meat and Drink, Mo-  
tion. Sleep and Rest, are absolutely necessary *for* the Purposes  
of Life, so 'tis no less certain, that any Fault or imperfection  
in thefe Things produce Disorders in themselves the most ter-  
rible, and to the human Constitution the most fatal. This  
holds true, not only with regard to Things extraneous, to the  
Conshtution, but also with respect to those internal Substances  
which are immediately conducive to the Support of Lise, **and**the Preservation of Health, such as the Blond, the Lymph, and  
the Animal Spirits; for, as the Perfection of the Vital Functions  
depends upon the due State and Temperament, the just Com-  
mixture, and Degree of Motion of these Substances; so the  
more immediate and direct Causes of Diseases must he derived-  
from the Defects they labour under, and their several Degrees  
of Recess from a natural State. - There are also other Fluids in  
the Body, which, tho' not fo immediately, are yet so absolute-  
ly necessary to Health, that their becoming faulty or peccant  
must considerably destroy it, and lay an unavoidable Founds-  
tion for Diseases. Instead of all other Instances of tins Kind, **I**shall, at present, confine myself to *the Bile ;* the Usefulness  
and Necessity of which Liquor, for the Preservation of Lise  
and Health, are fufficientiy known to every one who is ac-  
quainted with the rational and solid Principles of Physic. Its  
being found in every the most minute Animal is a sufficient  
Proof of this; Tor there is not a Possibility of finding, in **the**whole Extent of Nature, a single Insect destitute os a bilious  
Humour. And, indeed, when we come to explain our Senti-  
mentS on this Subject, we must acknowledge, that the *Bile*lodged in the Bodies of Animais is a real and genuine Medicine,  
wisely elaborated by unerring Nature, for preventing Diseases,  
destroying their Causes, and correcting the Faults and Disorders  
os the Constitution ; and that, by means of its incomparable  
Virtue and Energy, Animais are kept alive, and preserved in  
an easy and comfortable State of Health, as I shall, in the  
Sequel, shew more fully. Since, then, the *Bile* is so highly use-  
ful and efficacious in maintaining a State of Health in the Body,  
by proving, as it were, a natural and universal Medicine, It.  
must of course follow, that when this Liquor is either faulty,  
with regard to its Quantity, or depraved by a Recess from its  
due *Temperament* and *Crofts,* a sure and unavoidable Foundation  
for Diseases must be said : Since then many^and thefe, too, for-  
midable Disorders draw their Origins from some Fault Of the  
Bile, the principal Virtue and Energy of the Medicines, em-  
ploy'd in curing them, ought to consist in correcting this Li-  
quor when peccant in Quality, generating it when defective,  
or evacuating it when too abundant in Quantity ; for as the  
Bile, when in its due State,. is justly to he accounted a true and  
genuine Medicine to the Bndy, so we must readily grant, that  
the most important of all other Medicines are such as are calcu-  
lated for reducing this Liquor to a natural and temperate State ;  
and that the principal Business of a Physician consists in invent-  
ing and applying such Remedies with Judgment. I shall there-  
fore make it my Bufiness, at present, to consider the *Bile,* not  
only in its natural State as an universal Medicine to the Body,  
hut also in its preternatural and depraved State, as the Cause  
find Origin of many Disorders.

'Tis well known to Anatomists and Physicians, that the prin-  
cipal, if not the only. Office of the Liver is, by the Laws os  
a certain beautiful Mechanism, to filtrate and strain that active,  
saline, and sulphureous Humour, call'd the *Bile,* from **the**Blood, thro' the Trunk of the *Vena Porta,* **the** Hepatic Artery,  
and its glandulous Kernels. K ~

It must he own'd. Anatomists are not agreed among them-  
selves whence the Gall-bladder, adhering to the Liver, is sup-  
pherd with the *Bile* it receives ; for some of them aje of Opininn,  
that the *Tunica Glanduloso* separates it from the Blood convey'd  
thither by the Cystic Arteries; others again maintain, that there  
are some Very minute Ducts inserted in the Bottom of the Gall-  
bladder, by means of which the *Bile* is convey'd to it; and an-  
other Class of .Anatomists Venture to affirm, that there are cer-  
tain Cysti-hepatic Ducts, by means of which the *Bile* is imme-  
diately convey'd to this Receptacle. But, what Judgment we  
ought to form concerning these different Opinions, we may

.. Earn from the following Experiment, made by *Bohnius* and  
some others. Upon opening a Dog, the whole Bile was express'd  
-from the Gall-bladder, and the Cystic Duct tied ; but the Sub-  
ject remaining alive for some time after; they expected to find  
some mote Bile in the Gall-bladder, notwithstanding the liga-  
ture on the Cystic Duct, and tho\* all Communication was cett  
off between the Gall-bladder and the *Porus Hepaticus.* But  
they were disappointed; for, instead of *Bile,* they found only a  
littie grumous Blond. Hence the more accurate Anatomists  
z justly maintain, that the *Bile* lodged in the Gall-bladder is  
convey’d to it from the common Hepatic Duct itself: For the  
Communication hetween these Ducts is highly obvious, since,  
by blowing into the *Ductus Cholodochus,* heth the Gall-bladder  
and *Ductus Hepaticus* are inflated. On the other hand, by in-  
iroducing a Pipe, and blowing into the Hepatic Biliary Duct,  
the *Hepatic Duct* itself, the *Cystis,* and the *Ductus Cholodochus,*are distended, in Man also, and in other Animals, the *Hepa-  
tic-us\0. Cystic Ducts,* uniting, form together one common Canal.  
Now if we consider the Situation os the Gall-bladder, its Bot-  
tom is placed in a low declining Part ; but its Neck, and the  
Biliary Ducts, are situated higher: Hence 'tis probable, that  
when the *Bile* descends slowly thro' the *Porus Cholodochus,* by  
reason of its Oblique Insertion among the Coats of the *Duode-  
num,* especially is that Intestine happens to be empty, it falis  
hack into the Gall-bladder, which is placed below, especially

- Is it is .not very full; where it remains, till, either by the Com-  
pression os the Intestines, or the proper Contraction of the Gall-  
bladder itself, it is again express'd. In an Ox this appears Very  
plainly, fince the Hepatic Duct To opens into the Neck of the  
Gallo bladder, which is pretty tendinous and nervous, that the  
*Bile* can as easily descend into the Gall-bladder, as it can be  
font off to the *Duodenum,* thro' the common Duct, in the  
same Subject a pretty surprising Circumstance occurs; for a  
certain small Papilla is Observable, almost in the Middle of the  
interior Membraneos the Gall-bladder, and is prominent almost  
in the same manner as the Extremity of the *Ductus Communis*appears to be in the *Intestinum Duodenum.* This small Papilla  
seems to he the Orifice os the Duct, which pastes between the  
Membranes os the Gall-bladder ; and-he Protuberance performs  
rhe Office of a Valve, by preventing the discharged *Bile* from  
returning the same Way it went out: ‘

r But the .BIfrin the Galhbladder differs Very considerably  
from that in the Liver ; sor the former is thicker, more acrid,  
-rnorebrtter, and of a deeperColour, than the latter, which is  
shore fluid, more diluted,- and less bitter. But by what Means,  
and for jvhat Purposes, she *Bile* contain'd in the Gall-bladder  
undergoes such a Change, seernsto be a-Matter of such Import-  
ance, as to deserve an accurate and careful Disquisition ; and  
that our Inquiry into thin Particular may he the more distinct,  
1 shall.premise a few Things concerning the Structure of the  
Gall-bladder. We observe; then, that the Gall-bladder is made  
up of several-Membranes, the innermost of which, almost in  
every respect, resembles *atiCTofnica Villisca* of the *Duodenum* r  
In this Membrane there are also Various Furrows find Ducts,  
with Valves appropriated rothem *V* but no Glands are to be  
discover’d. The Membrane which lies nextto this is of Ripon-  
ginus Vascular-Contexture; made up, as it were,-osVarious Pel-  
licules, in which small Bubbles of Ain are lodged? 'Tis not th  
he doubted, -but this Membrane affords an Origin to a large  
Num her ofLymphaticVessels ; tho', at the same time. Very many  
of those, .found in the Cystis, are distributed in it immediately  
from theLiVer. - The third'Coat is muscular or fibrous; but  
we .neither observe a- nervous nor a tendinous Coat, either es  
the Bottom of-the .Gall-bladder, or in its Cavity; however,  
nos,only its Neck, but *orsurae Hepatic* and *Cystic Ducts,* are  
made up of.-a pretty -strong tendinous and nervous Coat. The  
external Coat- is furnish'd from the. *Perilonaum*; and hetween  
this and the muscular Coat; arterial and Venous Ducts are seen  
distributed.1 The Neele of the Bladder is very narrow ; and  
this Circumffance is Very conspicuous in the Gall-bladder of im  
Ox, but no Valve can he1 observed in it; however, *Bauhihe*and *Sptgelius* have, -in human Subjects, discover'd a semilunar  
Valve, extended in the Form Of a spiral Shell, and render'd  
rough with many Furrows. I must own, I could never find  
fuch a Valve in human Bodies ; but I heve evidently discover'd  
the-Narrowness of the Pastage, which is not rectilinear, but  
runs along in so oblique and winding a manner, as to resista  
Prohe, when introduced into it: And this Narrowness seems to  
be of no other Use, than .to .prevent the Return of the thicker  
*Bile,* when once discharged from it into the Gall-bladder; but  
the thinner and more diluted Hepatic *Bile* finds a commodious  
Passage thro' it. . ..I: t: y - ' r

The interior Coat of the Bladder being villous, like that .of  
**the** *Duodenum,* performs the Office of a Strainer, thy secerning  
the thin-and watery Part of the *Bile,* and pouring it into the  
Lymphatic Veffeis j for it is not to be deny’d, that the Vessels  
nor only in the Gall-bladder itself, but also those distributed  
around it, contain a Lymph ofa hitterishTaste. Besides,'tiscon-  
firm in by many Observations, that, in a preternatural State, a  
z large Quantity of thin *Bile* has soused thro' the Pores -of the

Coats of the Gall-bladder.. But because this interior Coat segni-  
rates the thinner Part of the *Bile,* what remains of course acquires  
a thicker Consistence, and a more bitter Taste. Besides\*, the  
Bladder, by reason of its camose Tunicle, and considerable  
Nerves, is pofless'd heth of a Power of Sensation and Motion ;  
but more especially its Biliary Ducts, which are furnish’d with  
a pretty strong and nervous Coat; sor which Reason very tern-  
ble Pains and Spasms may sometimes happen in them. As  
*Vieussens* has justly observed, from the semilunar Hepatic Plexus  
Of the Right Intercostal Nerve, there arise six Fibres; the three  
inferior, and. smaller of which are distributed to the *Vasia Chose.,  
dacha* of the *Gall-bladder,* to the *Pylorus,* the *Duodenum,* and  
the *Pancreas,* in order to give them a due Tone and Constri-  
ctioni Hence also the great Consent between these Parts is to  
be accounted for ; and it is not to he doubted, but that the  
*Pile* descends into the Intestines by means os its Weight, and in  
also assisted in fo doing by the proper Motion of the Ducts.  
Besides, we ought carefully to advert so the Insertion of the  
*Ductus Cholodechus,* winch creeps along, almost for an Inch,  
hetween the exterior and interior Coats os the *Duodenum,* and  
at last opens with a round Orifice into its Cavity.

si But before ! treat of the remarkable Use, and absolute Ne-  
cessity', of the *Bile,* or consider the several Faults and Imper-  
fections to which it is subject, I judge it highly expedient to  
premise fuch Things concerning its Nature and Qualities,, as  
we learn from Experiments made upon it, that we may he the  
hetter able to form a Judgment of the various Phenomena and'  
Disorders produced by it. First of all, then, let us have in-  
course to the Evidence of our Senses; since, from the .Taste and  
Smell of any Substance, we are in some measure enabled to  
judge concerning the Nature of those Principles, of which it is  
made up and composed; It holds, then, universally true, that  
the *Bile of* every Animal is so intensely bitter, that a very small  
Drop of it communicates its Bitterness to half an Ounce of  
Water, when put into it. Now 'tis universally acknowledged,  
by the more knowing and skilful Part of the Chymists, that  
Bitterness Of Taste proceeds from an intimate Commixture of a  
somewhat earthy Sulphur with a Salt ; but what tiie Nature and  
Genius of this Salt may be, I fhall now inquire. According to  
our Conceptions,’ and indeed according to the Result of Experi-  
ments, an Acid, intimately joined with an earthy, alcaline,  
and sulphureous Substance, forms a bitter Mixture. Thus the  
sulphureous and acid Spirit of Vitriol, coagulated with Salt of  
Tartar, or fix'd Nitre, produces a neutral Salt of a bitterish  
Taste, as in Vitriolated Tartar, and the Arcanum Duplicatum ;  
tho' very sulphureous Wine-Vinegar, pour'd upon prepar'd Cor-  
ral and Crabs-eyes, afford a neutral Salt, which, is still some-  
whet more bitter. Besides, 'tis confirm'd by Chymical Expe-  
riments, that the bitterestSnhstances, such as Aloes, bitter  
Gourd, and Wormwood, lose-much of their Pungency of Taste  
hy an Admixture of alcaline Salts; which is no weak Proof,  
'that an Acid contributes not a little to. the Preduction of that  
Bitterness sof Taste which is found in the *Bile os* Animals’;  
fince, when that *Acidics* destroy'd, the *Bile* becomes insipid and  
tasteless. It is also consum’d by Experience, chat bitter Vege-  
tables, by Incineration, yield a larger Quantity os Salt thdur,  
any others ; hut tris certain, that a fix'd alcaline Salt is gene-  
rated or produced hy an intimate .Combination of an acid Sul-  
Thur with Earthe’ ‘ ' *-sc si" i "*

si Besides, the penetrating and permanent Taste Of the *Bile,*when applied to the Tongue, is a Circumstance which sufficient-  
ly proves its remarkably active Nature ; for every Substance  
which penetrates, and diffuses Itself upon, theOrgans of Taste,  
is of a subfile Quality. Among other Circumstances,;which  
prove its highly penetrating Force, it is none of the least consi-  
derable, that when a few Drops of it are pour’d upon the Coat  
of the Stomach, or any of the Intestines, a deep-yellow. Colour,  
not to be obliterated or wash'd off by any Art, is forthwith in-  
duced on the Part to winch it is applied. Its penetrating Qua-  
litres are sufficiently known to Hatters, who, in order to give a  
deeper and more lasting Colour to their Hats, mix it with Sub-  
stances os a black and inky Colour. Its Saffron-colour may  
also he easily accounted for, from the highly subtile and active  
Sulphur it contains, if the Chymical Axiom is right, that *real  
yellow or red Cesours are produced by Sulphur.* But Chymical  
Distillations, and'Mixtures of *Bile* with other Substances, dis-  
cover its Elements, or component Parts, far more effectually  
then any thing else. Thus twelve Ounces of the *Call* of an Ok  
yield eleven Oimcesof Phlegm, intirely Void of all Tasto; From  
the remaining Ounce there was afterwards drawn a. Spirit of an  
ungrateful and ernpyreumatic Smell, .which speedily produced an  
Enervescenee'with Spirit of Nitre, and tinged Syrup os Violets  
green, as a Proof of its alcaline Nature: It also yielded some-  
thing like an On, partaking of the Nature and Effects of the  
aheye-mentioffd Spirit..- The earthy *Caput Mortuum,* winch  
remain'd in the Retort, and weigh'd two Drams and an half,  
by Incineration, yielded one Dram of a manifestly fix'd alcaline  
Salt: From this Experiment ’tis obvious, that there is a Very  
great Quantity of Water in the *Bile -,* which is also plain from  
this, that it may he reduced to an Extract; for two Ounces of

OxS Gall, inspissated in a gentle Heat, yield not-more then  
one Dram of thick Extracts Besides, by the Assistance of a  
Proper statical Instrument, .sour Ounces of *Bile* are sound to  
weigh scarce two Drams inore than an equal Quantity of pure  
distil’d Water. If the Extract of OkS *Bile* is -min’d with ah  
equid Portion of Salt of Tartar, and again distll’d in a Glass  
Retort by means of a Sand-heat, then an 'urinous and manifest-  
ly alcaline Spirit is yielded, which raises a ‘violent Ebullition,  
with any Acid ; it also turns the Solution of Sublimate to a  
onilkj', and the Syrup of Clove-gillyflowers to a greenish Co-  
lour, which all volatile urinous Salts generally do. But the  
.Reason why an Addition of the Salt of Tartar produces, a more  
alcaline, volatile, and urinous Spirit, seems to be this : Calcin’d  
plealine Salts make a yen. close and strong Attack on the Tex-  
tine of oleous Substances, and, by destroying their acid Parts,  
volatilize and idealize their Sulphur more highly. Something  
of a like Nature is observed to happen in distilling Soot, Amber,  
mid Tartar, which, when diflil’d alone, yield an oleous acid  
Spirit';'but if, hesore Distillation, they are'mix’d withafixed  
sisti, the Spirit obtain’d is highly urinous and olly. , \_ -

. I now come to consider the Mixtures of *Bile* with other Sub.  
stanccs, the Use of which, in discovering the Virtues and coni'-  
jjoncnt Parts of Bodies, is very great. It is, - therefore, con-  
firm’d by Experience and Observation, that *Bile* produces ah  
Effervescence with no Acid, except out fuming Spirit of Nitrti.  
This Phenomenon feems to run counter to common Experience,  
since the *Bile* is thought to he of an alcaline Nature Nor does  
the Gal! of an Ox produce an Ebullition, with highly concen-  
trated Oil of Vitriol,.nor immediately assume a greenish Colour,  
‘as many imagine; biitPerturbation, Coagulation, and Precipi-  
tation, are rather the Results’of theis being mix’d. But it is  
. remarkable, that Spirit of Salt renders *Bile* thicker than Spirit of  
Nitre and Vitriol; and that it is not Stall coagulated by Spirit of  
Nitre. When concentrated Spirit of Sal Ammoniac, prepar’d  
with quick Lime, is mix’d with *Bile,* its Colour is exalted, it  
'becomes more saturated,- and the Mixture remains'diapha-  
nous. Tire fame Phenomena are produced, whan the Expe-  
riment is made with Oil of Tartar 'per Deliquium. But  
ve must here observe, that an Admixture os Alcalis very much  
impairs and. diminishes the Bitternefs of its Taste. When *Bile*is mixed with the Syrup of Clove-gillyflowers or Violets, the  
"Mixture 'does not heconie green, but assumes such a Colour as  
is usually produced by a Mixture of a yellow and a red Sub-  
stance,- Highly rectified Spirit of Wine also renders *Bile* tut-  
'bid, and' st loses itsTrahsparency when mix’d with it; but a  
Very small Quantity of the *Pile* is precipitated jo in, and. the  
Spirit becomes highly bitter. 'On .the. contrary,' a very small  
Quantity of *Saccharian Saturni,* sprinkled in, Rise, produces **a**.very, thick Coagulum in st." But inspissated *Bile,*upon pouring  
Gil of Vitriol into it, did .riot produce an Effervescence, hut  
lost its blackish Colour, and became gradually livid ; the Min-  
Sure, ’in the, mean tube, was .of a highly disagreeable Smell.  
'OurTurning Spirit of Nitre,’mix’d with! Extracti of *Bile,.* ped.  
iduced a very strong .Effervescence, accompanied with a great  
ideal of Froth, 'Heat, and a reddish Smoke; but the Extract  
was dissolved into a Mucus, which, by means osOil of Vitriol,  
)was reduced to a Coagulum of a more pitchy Colour: Almost  
the whole Extraci was ilistolved in Spirit of Wine;. as also in  
Water". The Exfrail of *Bile* dried, and exposed to a Elaine,  
melted ; nor did-it immediately take Fire, for it did not burn  
till its humid Parts were evaporated: It diffused the Smell of **a**fetid volatile Salt ; and "the Ashes left were impregnated with a  
‘large Quantity of alcalinoSSalt, as was,obvious from their  
Taste. *Jso"* **7,** *'...‘..soiiet ‘ ...*

1 TOike Experiments thready mention'd, J shall add the fol-  
ilowing Observations- The *Bile* newly taken- from , the Gall-  
inlander of an Ox, is-diapbanous, and pretry fluid ; hut when it  
'is exposed to the open Air for some Hours, ^Transparency is  
diminish’d, it becomes thicker, changes' its Smell,’and in Prof  
cess of Time grows send ;-*for ’tis scarce* credible-.flow, easily,  
mid how soon, the *Bile*contracts an SbominablesFetor, even  
.much fooner'than the Blond itself; which' isi'a Proof, 'that as all  
the other Fluids of Animals, so the Rise-consists of Parts, whose  
,Union add Commixture the Heat of the Air alone is. sufficient  
to disjoin'and separate,. It must also be observed, that the  
'Serum of Eloed or Lymph,’ held over a gentle Heat in a Spoon,  
.is converted to a gelatinous Mass i which Experiment is in vain  
tried upon *stile,* which is Jefs coagulated, by Heat, hecause'the  
'nutritive. Lymph is none of its component Pants. As for the  
"Uses made of *'Bite* by 'Tra'des'-pcoplc, it is most generally cm.  
ploy’d by Scourers, for inking greasy'Stains out of'Cloaths;  
‘ansi liy Painters', for heightening their Colours, and cleaning  
'Pictures' ; for which last'Purpcfe it is very good. Besides, Ox’s  
“Gall proves an. excellent stimulating Ingredient in a Clyster;  
xnd,)by some, the Galls of other Animtio are prefcrihid with  
Success, in Epilepsies, Quartan Fevers, hard 'Labours; and  
Hysteric Fits. . ' ’ s'T "  *"y 'y*

fTinsc.'iken, are the Experiments which I made **with the***Bile* of an Ox. However, I do not deny but the *Biles* of other  
.Animhispreurn forne.measure, differentfrorn.it'; and thet **even**

the Rife of one and the same Animal is not, at all times, of **the**seme Nature and Qualities. I could not subjedt any ccosidcr-  
able Quantity of human *Bile* to Distillation, because I had is  
not ; hut I am of Opinion, that its Difference from the *Bile* of  
an Ox consists in this, that it is somewhat thickerby which  
means it happens, that hy pouring Aqua-fortis into it, or Spirit  
of Vitriol, and applying a brisk Heat, an Effervescence is pro-  
duced, and the Mixture becomes green : Hence also it happens,  
that it is quickly coagulated by rectified Spisit of Wine. Hence  
it is not to be doubted, but that the human *Bile* is of .a far  
more active Nature, and more richly saturated with a saline and  
sulphureous Principle, than the Rise of other Animals: I must  
here observe in general, that the hotter Animals *use, thua Bide*.is proportionably of a more active Nature, *and vice versa. in*

The above-enumerated Experiments sufficiently prove to us,  
'that the *Bile* is not of a pure alcaline Nature ; hence it does  
Trot produce am Effervescence, hut with .the strongest Acids-  
Now every pure Alcali, whether earthy or. saline, speedily  
.causes an Ebullition, with every the most weak and gentle Acid.  
Hence ole learn, that the *Bile* is of an oleous and sulphureous  
Nature, for which Reason it burns; but it is not purely sol-  
-phureous, otherwise, when mix’d with Spirit of Nitre, or our  
.fuming Spirit of Nitre, it would excito a tumultuous Efferves-  
cence ; for such is the Nature of fubtlle Oils, thet, when  
mix’d with these Spirits, they produce an Ebullition; so that  
.the *Bile* seems rather to he a very temperate Liquor, made up  
.of oleous, earthy, aqueous, fallne, and volatile Particles. Ans,  
to explain myself in a sew Words, the hitter *bilious.* Juice in  
all Animals; in iis Commixture and Crasis, almost resembles  
.the Juices of bitter Herbs, especially that of the lefl’er Centaury,  
the Extract of which is not much different from inspiflated  
*Bile* ; for the Juices of all these bitter Plants are made up of  
Sulphur, and an earthy alcaline Salt. As to these Plants, we  
ought also to consider, that their Juices,. when depurated; and  
distrain in the seme manner with the *stile, -when* mix’d with  
acid, alcaline, and spirituous Menstruums, cause Phenomena  
so much like thofe produced by the *Bile,* that we have all the  
.Reason in the World to helleve, that the constituent Parts of  
these Simples, as to their Mixture, Crasis, and Virtues, are the  
same with those of the *Bile..* Hence the Reason is obvious,  
why the Extracts and Essences of bitter Plants are so singularly  
and surprisingly efficacious in augmenting the Quantity of the  
*Bile,* when it is defective; and in correcting it, when its Qua--  
lity is depraved; two Circumstances which contribute not a life.  
tle both to the Prevention and Cure *of* Diseases. . .

Having thus taken, a View ,of.the Nature and Quallnes of  
*the Bile, it* now remains, that we inquire into the-particular  
Manner in which it is generated and elaborated in the Body.  
First of .all, then, I rnustobferve, that theRmidoesbnotexist in **the**Blond, under the fame Form, and in the seme Srate, in which it  
.appears in its Receptacles, which ate *the Porus Hipaistus' and  
Gall-bladder;* -sor neither the Blood nor Serum, are bitter,  
Dor, in a natural-State, are they yellow ; but the Serum becomes  
so by an Admixture of *Bile.* For which Reason it is plain, than  
the Materials, of which it is composed, are only lodged in the  
Blond ; which does not at all appear improbable, when 'we corse  
sider, thet large Quantities .of Sulphur, Earth;-Salt, Phlegm,  
and Mucus, of all which the *Bile* is composed, are sound in the  
Blond. Now ’tis known from Chymico-mechanicalExperi,  
menu, that the Qualities, Properties, Tastes,: and. Smells of  
Bodies, depend entirely upon the Mixture, Union, Position,  
Crasis, and Texture of their various Parts; which when chang'd  
or destroy’d, a proportionable Change is induced on the Taste,  
Smell, Consistence, and Virtues of the Body. : For this Reafon  
h peculiar Mixture of the pinguious, saline, earthy, and aqueous  
Parts of the. Blood, separated from the Blood, and Serum by  
means of their intestine Motion, constitutes and makes up the  
*Bile.* But to me it feems somewhatmiprobable, that the *Bile*should consist immediately of the chylous Parts of the Biood, or  
thofe which are most ssigbtly uhited with it; hut I am of Opi-  
nion, that all there Parts being resolved and separated from **the**Blood, by means of its‘intestine Motion are afterwards united,  
and form the *Bile.* Hence we plainly fee, thet, A large Quan-  
tity of *Bile* must necessarily be generated in People whose Bloed  
is agitated with a strong and violent intestine Morion : Hence it  
happens, thet young Men of choleric Habits,.who enure them-r  
selves to Exercise, and live upon hofFoods, abound with *Bile*whereas old Men, Children, the Phlegmatic, the Idle, andthe  
Lazy, have an aqueous, thin, and unactive *Bile.* Burning,  
continued, and tertian Fevers, afford us a signal Proof of this;  
since, in them, too great a Quantity os *Bile* is produced by the  
violent intestine Motion, which dissolves the Contexture of the  
Blond ; for it is surprising to observe,.- what large Quantities of  
*Bile* are daily .discharged, in the above-mentioned Fevers, by  
Urine, Stool:,' and Vomit; for which Reason-the. Antients  
imagni’d, that the Rise thus .discharged was the productive  
Caine of the Fever, whereas, it. is rather its Effect. For  
Instance, we observe, that the more violent and lasting **a.**tertian Fever is, the Excrements are proportionably more hili-  
bus t Nor docs Nature cease to generate new *Bile,* even during

**the** Paroxysm of the Fever; but this Fever is removed, or rather  
stopp'd and suppress'd for awhile, by the Use of that celebrated  
Medicine the ***Peruvian*** Bark; for. by using it a short time the  
-fiery Colour of the Urine is removed, it becomes thin and aque-  
ous, and the Excrements assume their natural Colour ; but, as  
soon aS the Fever returns, all these Symptoms return with it.  
From what has been said it is. sufficiently plain, that the Blood  
itself may, by a too.het intestine Motion, be resolved ***into Bild,***and other. excrementitiouS Liquors. The Truth of this is also  
consum'd to ussby hectic and latent Fevers, where the Blood  
itself is, by a continual and excessively violent intestine Motion,  
at last, consumed, and-converted into ***Bile*** and Excrements\*.  
Among the few who have adverted to this Circumstance, none  
shave been more explicit than ***Hildanus,*** who (in ***Select. Medic:}***' has these Words: '..-’.i ’ --- -y.:U.:’='

. . An "Tis something wonderful, and surprifing, that, on some  
Occasions,, large Quantities os ***Bile*** should be evacuated, and

" yet the Gall-bladder not be found empty aster the Death of the  
" Patients; ’tis;not; in consequence of this, to be doubted-,  
" but that the Bloed is, by an inflammatory Heat, parch'd arid

converted into ***Bile.gr.*** .We sarther observe, that the more  
we abstain from Food,., and the . Inore Exercise we use, a pro-  
portionably larger Quantity, of ***Bile*** is generated ; whereas an  
inactive Life, and high Feeding, prevent- and hinder its. Ge-  
neration. ss ‘ ss‘

Having taken a View of the Origin of the ***Bile,*** andits ge-  
nerating Cause, I shall now inquire in: what manner the Par-  
tides, forcibly separated from the Blood by ife-intestine Mo-  
tion, are united into ***Bile***; which Phenomenon s deduce frond  
the flow and languid Progress os the Blood thro' the LiverBut;  
for the better Illustration of this Point, I shall assiune the fol-  
sowing-mechanical. Axioms. . - .; - - -u

.1st. Substances capable of .heing mix'd, the more they are  
agitated, and the more quickly thesiare moved; the inore their  
Particles are divided and. broken. y pot

. 2d. The more minute the Parts are render’d by Motion, the  
more closely are they united, and the more, difficultly are they  
separated, from the.rest; . because large Bodies, by heing divided,  
have the Sum of their .Surfaces increas'd, and, in proportion to  
the. Sinafiness . of the Parts into which they are resolv'd, that  
Force, , with which one-Fluid endeavours to recede from another,  
is diminish!d.\_Hence it follows, that the homogeneous- Particles  
must unite,: come together, and rmore easily separate themselves’  
from a Mixture os heterogeneous Parts, when their -Motion is  
diminish'd :or:destroy’d, as .we evidently see in-extravasated  
Blood,inwhich, upon a Cessation of its Motion, the Serum  
is.separated from the Crassamentum. Since, then, we know  
from Anatomical Observations, that the Circulation of the  
Blood is flowest .in:the Liner,, because.it is convey'd to it by the-  
Vena Portae,: which has mo. Pulsation, and sis ςintroduc’d .into  
the smallest Ramifications dispersed - thro' .the Parenchyma ssf  
the Liver, in winch it dolon the Office of Arteries ; and since  
***an ImpetussiCA*** Motion iswanting4. the Blood mushmoye stowlyt -  
not only in this Organ; but also proportionably- so in alhthe  
Viscera, which have Vessels distributed to-them- from the Venal  
Portae: .Hence the Reason is obvious, why the Liver, the  
Spleen; the Pancreas, the Mesentery, and Intestines, are, sor  
the most part, the-SeatSiofthemostviolent chronical Disorders Y  
since, in these Parts, Obstructions,- Indurations, Stagnations of  
Bloed,, Inflammations, and ^.Corruptions, may. very readily  
happen. For /which Reason,? since in.this Vein, the: Blood is  
deprived of its sweet and chylous. Parts.;xite -gsqfs, sulphureous,  
and saline Particles, as it were, parched with Heat, togetherwith  
its. mucilaginous and lymphatic Parts,, movingdlowly, unite/  
are collected and secreted ;- by which new Union and Mixture,- at  
new State, Crasis; TTaste, and .Colour, result..st But 'tis-not toi  
be doubted,: hut that the new-generated ***Bile*** is successively.more  
assimilated jto that in the Cystis and Biliary Duets, that it may  
provea kind ofF erment; for astheBlood,byits intestineMotion,  
helpsuthe.Tiansmutationtofrthe ***new*** Chyle into Blond; and as-1Vinegar converts Wine pour’d-to it into Vinegar; so the ***Bile,'***upon the .Approach ofjthe.likec.Juice. sromtheBlood, easily  
Communicates its own Form, and Texturesto sese ;. ss / ... S i  
. Having .thusoonfider.'d the Natureof.theiSIZG.-imd inquirfdt  
into the . portionlar Manntr.miwhich it islgenesated, 1 nowr  
Come, to shew,: that the ***Pile*** is a moble andi.usefuL-Medicine to:  
every Species of Animals,.,: This?! shall endeavour, th prove by’  
the sollowing. Arguments, .- First, then, there is .riots in. Naturo\*  
an Animal destitute ,of this Liquor.;, for. 'tis found -riotionlyJii.  
Quadrupeds-and Pirds, but also in the most inconsiderable and

’ diminutiveLnsects; andtholsome Animals want a.Gall-bladder,.  
yet .they thy !noi means want, a: Laver .and Ducts. conveying ’the]  
***Bile*** from St either to the:-Stomach!or Intestines. : Secondly;:  
the -Necessity. oL the ***Bile*** ini Animals appears From, this, -tlrati  
wise and. unerring Nature has appointed shlargeat. Organ, andi  
which takes .up Ib considerable a: Space in the Abdomen, forno»  
other End but-to secrete.and distribute it;; .-now- 'tis certain,j  
that no Animal whateveT.wchtsithis Organ. Thirdly, among  
other Things of an.Anatonheal.-Nature, "tissworth while to ob-  
serve, theta in .most, of the more noble j Animals, .the. ***Bile in.***

convey'd by a double Way,'4or Duct, from the Liver to the  
Duodenum , .for, besides the Hepatic Duct, winch conveys **the  
*Bile*** immediately from the Liver, there is also a ***Cystic Duct ;***and these, sor the most part, join, and coalesce into one com-  
mon Duct, which is call'd ***thri Ductus Chalodachus.*** If we re-  
flect rightly upon this surprifing Contrivance, we must have our  
Minds fill'd with the most noble and elevated Ideas of its Au-  
thor ; for, fince this Liquor is absolutely necessary to the Lise  
of every Animal, if one of these Ducts should happen to be  
obstructed, so long as the other remains pensions, this balsamic  
Liquor may be carried to its destin’d Parts ; oris, on any Occa-  
sion, it should be elaborated in too great a Quantity, it is, by  
this means, stor’d itp for future Use, as it were, in a Repository.  
Fourthly, , the Use of rhe ***Bile*** appears from this, that, in ail  
Animals, it enters the- first Intestine or Duodenitin, very near  
the Stomach, and is there pour'd upon the Mass of\* Aliments.  
If then it had been an excrementitiousDiquor, or hurtful to  
the Constitution, the all-wise Author of our Nature would  
have rather thrust it directly into the intestinum Colon, or  
Rectum, that it might not, by its Sordes, contaminate and  
corrupt the Chyle, which is the Food and Nourishment of the  
Blood, and os the whole Body. In the last Place, its singular  
Use, and absolute Necessity, aresussicieinly demonstrated, by its  
being generated in such a large Quantity ; since, according to  
sorhe, and especially ***isorclli,*** there is a Pound os this Liquor  
produc’d every Day in the larger and more bulkyAnirnalss .'  
‘ Thss the above-mention'd Arguments are sounded only upon  
probable Conjectures; they are, nevertheless, sufficient for prov-  
ing the Usefulness of the ***Bile.*** But that I may be a littie more  
blear and explicit upon this Point, I lay it down as a Maxim  
hot th he-contested, that Life, and much inore Health, de-  
pends, upon a constant and uninterrupted, a due and equable  
Circulation of the Blood and Humours, thro1 the whole Body.  
This Motion of the Blood is justly dignify'd with the Epithet  
***Vital***; for-it preserves the Body from Putrefaction, renders it  
sound and durable,- and: nourishes or repairs that latent and in-  
conceivable Principle, by means of which the Union and Cor-  
respondence between the Soul and Body ure maintain'd. So long  
then asthisCirculationof the Humours is free and uninterrupted,  
we are said to enjoy Life and Health ; but as soon as it begins to  
be impair’d, various indispositions. Pains, Depravations ds ***the***Actions off the-Body, Putrefaction, and, at last. Death, hap-  
pen. Now; in orderto maintain and keep up this Circulation,  
^ absolutely-necessary, that theBlood should be In such **a** State  
of Fluidity, as to be able to move freely thro' the smallest and  
most minute Ducts of the Body/ ’Tis ’ also requisite, that the  
component heterogeneous Particles of the Blood should be inti-  
mately mix'd- and united, fince this very Circumstance consti-  
tutes its Crafis and Texture.. Now,' 'tis confirm'd by Expe-  
rience,1 that nothing is chore, prejudicial and injurious- to **the**Texture of the Blood, than tenacious. Viscid, and acid Sub-  
stances; for these are destructive of Fluidity, are not easily put  
into an intestine' -Motion, and cannot be intimately mix’d with  
other Fluids.'- Now 'tis obvious, ‘that we eat various Sub-  
stances- which' abound with an /arid,.' Ἀ viscid, and tenacious  
Principle, from which a thick,-Viscid, and immiscible Blood  
and’ Chyle must'- he produc'd, τ Besides, 'tis necessary for  
Life, not only that the Blood should be in a State fit sor Cir-τ  
cnlation, but also that proper Motion should he used ; sor  
Motion is essential to Lise and Health. 'Tis plain that those  
Fibres os our Bodies, which are destin'd' for the Purposes of Mo-  
tion :and Contraction, perform their respective Offices hetter  
and sooner; '-wheii.extraneons Bodies'in' Motion act upon them..  
by their penetrating and -active "Qualities; for we observe, that  
only-the penetrating Smell of Wine, spirituous Liquors, ' and  
volatile Salts, soon raise the saint. and languid Motions ,os the ;  
whole Body. - -Nature has also need of such a natural Mover,  
**to** give due-Motion and Impulse to the solid Parch, without  
which the Circulation could not be carried on, 'non.Life' and  
Health preserv'd.--. ’ - S" s ss SS :

'1 now come to\* Consider, by what means the ***Bile*** Js.sthe natu-  
ral and universal Medicine of our Bodies'; 'and how st comes to  
Pass, that; it affords all the Supplies necessary to the Fluidity and,  
Motion Os theTlood,: by which Diseases, and Death are'pre-  
Vented.s - I haveedready mew’d,' that the ***stile*** is a Liquor of a  
veayacttveimd penetrafing Qttality, since st is oornpos’d os sui-  
phereoim oily Paris, imurfd with Vointhe and fix’d Salts 7 antju  
ut'the'same-tirhdY-’ofin Very temperate' Nature, by Teasim of .the,  
Admixture os aqueous and earthy Parts. This Liquor, gnirti'y-  
bydts'penetrating Quality, .and partly .thy'its Texture, incides,\*.  
tKnperateSj-imd'eorredbr the Viscid, think, and’held. Matter,  
which domesinoimthe Stomach; and, which is A Cirouinstanoe  
of-the greatest Importance, it contributes Very much tossenderi  
the'Chyle, anjooonseqnentlYThe Blood, volatile,smildi find  
spiritnous/c Now"tis-'inert to be doubted, but that, notlonly in  
theStomachjbut alsoinr the small' Intestines, the Aliments undergo  
an intimate Solution and Fermentation, whereby their Adhesion  
and Texture are intimately dissolv'd and destroy'd s as the  
Change induc'd upon their Taste, Smell, and Consistence,  
suffieientlv Droves. Now 'fis known, that-soirituous and active

Liquors, added to Substances during their Fermentation, inti-  
Inatelv dissolve these Substances bf an intestine Motion, and add  
an excellent spirituous Quality to them- The same happens,  
when the *Bile* is pour'd upon the Aliments when under Fer-  
mentation; for, by this means, the acid and viscid Principles  
are not only corrected and subdued, but the chylous Mass itself  
is render'd gently spirituous, subtile, temperate, and of a sweet-  
ish Taste. But that the *Bile* undergoes a Fermentation in the  
intestines, we may gather from its entirely laying aside its Bit-  
terness ; for the fermentative intestine Motion intimately dis-  
solves, and fully inverts the Union, Crasis, and Texture of the  
Parts on which its Taste and Quality depend. Thus the *Bile*prepares the Chyle in the *Prima Viae,* and renders it fit and  
disposed for performing the Vital Circulation, and conveying  
Nourishment to the whole Body; and without this Humour,, the  
Chyle remains think, crude, unsubdu'd, and unfit for progress  
five Motion ; and when 'tis convey'd, in such a Condition, into  
the Mass of Blood, it must lay an effectual and sure Foundas  
tion for Disorders and Indispositions- *I have been obliged to pre.:  
serve the Word* **FERMENTATION,** *in order to give the Meaning*of Hoffman 7 *but must confes.s, that it conveys to sue na sutiso  
factory Idea, and gives me no Insiormatiori.*

A Chyle thus season'd with a spirituous Balsam, when it  
reaches the Blood, is intimately mix'd with it ; for .the more  
subtile and fine the Parts of Fluids are, the more easily they ad-  
mit of an intimate Mixture; and, on the contrary, the thicker  
Fluids are, the more easily they recede from, the other hetero-  
geneous Particles. The Chyle, also, being impregnated with  
a certain stimulating Salt, proves an excellent Quickener of the  
Tone and Impulse os the moving Fibres of the whole Body; by  
this means the Circulation of the Humours, which remains active  
so long as the Fibres are in a due State of Vigour, incomes  
quicker and more free. For this Reason the *Bile Vf2S* by the  
. Antients, and still is by the Moderns, justly styl’d the Balsam  
of the Body; not because by its balsamic Quality it prevented  
a Disposition to Putrefaction, but hecause it contributed much  
to a free and quick Circulation of the Blood ; Tor this Circula.-  
tion is, if I may so speak, the best Balsam to the Body, in which  
there can be no Corruption so longas it remains entire; sor the  
perpetual progressive Motion of the Body, together with its  
Fluidity and spirituous Nature, resists the Tendency To Putre-.  
section; hesides, by means of this circular Motion, many re-  
crementi tious and superfluous Parts; which are strongly inclin'd  
to Corruption, are evacuated, and Carried off .by the proper  
Emunctories. . '. su .δ᾽.-.-... \ )

There is still another Very considerable and important *Use-os*the *Bile* in the *Prirna Via* ; . sor it proves a due and proper Sher,  
mulus to the Intestines; by means of winch they are excited to  
their due peristaltic Motion, which is highly necessary both sojr  
pressing the Chyle into the lacteal Veffeis, herd continuing the  
Propulsion of- the Feces. ’Tis certain that a due Tone  
of the Intestines, which consists in their proper *Systole* and  
*Diastole,* contributes Very much to the Secretion and Expulsion  
os what is useless and recrementi tious; for .Is .the Excrements,  
are not duly and regularly discharg'd, the Blond and . Lymph  
must, by that means, not only he render'd highly impure, hut  
also a strong Disposition to spasmodic Disorders is brought on.  
The *Bile* then, in its due and natural State, when pour’d into  
the Mass of Chyle, promotes the Discharge of the Excrements,,  
partly by its irritating Acrimony, and partly by the elasti c spiri-  
tuous Quality it bestows on the Chyle. .

Tho' I have already sufficiently prov'ss, that the *Bile is an*excellent and useful Medicine, which .preserves the Body from  
Disorders; and happily prevents the Tendencies arid Dispositions  
to them ; yet the uncommon Efficacy, arid singular. Virtue, os  
bitter Medicines, both in guarding against, arid removing many-  
Distempers, is a strong additional ProoTpf. the Assertion. I.  
have already observ’d, hew great an Harrnonyand Affinity,. in  
point of Mixture and Crasis, there is hetween the *siesile,* arid,  
the Extracts and Juices of bitter Herbs, especially *os* the lesser  
Centaury : Now daily Experience conxinces us, tlher no ,Medi-  
cines *ore more* safe and efficacious, either, for preservative; Uj.  
curative Intentions, than'those winchheome under the Tjenp-j  
munition *sis flitters.* - Elixir Proprietatis, and Aloes Itself, re7I  
duc’d ro'a proper Form, with, bitterish Extracts, .and an.Addin'  
tion os the'balsaimc Gums, as also the Essences and Extracts os-  
Wormwood/ rhe leffer Centaury, Fumitory, and Gentian, are;  
Medicines soTafe and universal, both for.guarding against, and  
curing, almost all chronical Disorders, .that. .Medicine would,  
he Very imperfect and defective without them. Many Remedies;  
might be discarded from Physio, without Its sustaining any con-  
stderahle' Loss ; but Bitters are absolutely.necessary..‘to its Per-  
fection ; for by these more happy Effects are in reality produc'd,)  
than by Volatile, spirituous, oleous, "fix’d and: earthy. halts4;  
since they are more agreeable to the Constitution, ' more tempe-’.  
rate in their Qualities, and correct and amend, what is peccant,  
in a more gentie and gradual manner ; provided.theTIse *os* them;  
is persisted in *for* a considerable Time. Iri' short. Bitters must,-  
in the very Nature of the Thing, be excellenr and. essicaciouS)  
Remedies, since.they perform the same friendly **Offices with:**

the *Bile,* which they generate and augment, when’deficicht in  
Quantity, and correct, when deprav’d and vitiated in Qua-  
lity. Nor, indeed, can we he deceiv’d with regard to the  
Propriety of Bitters, since provident and unerring Nature ela-  
borates and prepares a bitter Liquor in the Body, which proves  
a mighty Preservative to it.

I now come to resolve this Question, *LFhethcr the Bile cir-  
culates?* The first who advanc'd this Opinion was *Borelli, in*his Book *de Motu Animalium* ; where he supposes, that the  
*Bile* being a highly useful Humour to our Bodies, some.Ounces  
*os* it are every Hour convey'd from the *Biliary* Ducts to the In-  
festines; that such a Store of it could not he generated from  
the Blood ; that the greatest Part of it was thence again pour'd  
into the Blood, by mean? of the meseraic Veins, winch, like so  
many Leeches, sucking out the bilious Humour, convey it hack  
again to the Liver," thro' the *Vena Portae } and that many of  
the* active Particles *of* the *Bile, being mix’d with* theChyle, were  
thence convey'd into the Blood, where they furnished new -  
Matter sor the *Bile.* This Opinion was some time ago broach'd  
at *Leyden,* in a formal Dissertation on the Circulation Of the  
*Bile,* The Author Of this Dissertation thinks, that, in the  
Space of twenty-four Houts, at least six Ounces of *Bile* were.  
pour'd into the Duodenum, which he proves by an Experiment  
made on a Dog; and he is of Opinion, that such a large Quan- .  
tity of *Bile* Can by no means be generated in the Liver, unless -  
we suppose a Circulation of it.- But in Man, he supposes  
that a whole Pound of *Bile* is secreted every Day.. In Confirm-  
ation of this, he draws an Argument from the meferaic Veins,  
which are so large, that they are not. only destin'd for conveying -  
the Blond, but another Humour also. He afterwards endeavours \*  
to prove the same Fact from the Feces of an Embryo; which  
he takes to *be Bile* stagnated in the Intestines.- But, because this  
does not answer the Quantity of *Bile* winch daily stows into  
the Intestine, he. is of Opinion,'that it again enters the  
Pores of the meseraic Veins: These he thinks most proper sor  
this Purpose, hecause, by blowing thro' a Pipe introduc'd into  
the meseraic Veins, the Air enters the Intestines; and that, in  
feather'd Animals, winch are destitute of lacteal Veffeis,: the  
Chyle is cany'd tino' the Veins ofthe *Mesentery.*

. Bur several Circumstances hinder us from believing these As-  
inrtions ; for, in the first Place, it is not as yet proved by any .  
conclusive and satisfactory Argument, that so large a Quantity  
of *Bile* is secreted in Man: But tho'we should grant, that there  
really was, yet I am of Opininn, that the large Quantity OfSe-  
rum produc'd by so much Aliment, is sufficient to generate it *i*shr,. since an uninterrupted Heat and Motion act upon the Ali-  
ments, they must necessarily he resolV’d into sahne and excre-  
mentitious Parts,.Of Various kinds.:. For, tho' our Aliments  
should he swallow'd down insipid,, and without Salt, there will  
he, nevertheless, daily a large Accumulation Of sulphureous  
Salts, conspicuous inthe .Bird andUrine; and the Quantity of  
these Salts is owing to the: intestine Commotion of the Blood .  
alone. Since, then, the Urine. contains so large a Quantity of  
Salt, Sulphur, Fat, and Mucus; as we daily see excern'd, and  
since it is furnish'd from the Blood, find not immediately from  
the Aliments, I see no Reason why .the*Bile* should nos, in like  
manner, receive a fufficient Supply from the Blood.; so that  
there is no Necessity for its circulatory Motion: Nor, in Em-  
bryos, is the *Bile* generated in so.large a Quantity,, because the  
intestine Motion of their Fluids is Very temperate, and already  
freed, as st were, from the bilious Sordes in the Viscera of their  
Mothers. Nor does the .Largeness of the meseraic Veins add  
any Force to this Opininn, for the Veins of the whole Body-  
are always larger than the Arteries; and when the Blond, carry'd  
thro' the Branchesof the Liner, does not pass so expeditioufly.  
thro' the Ramifications of the *Pena Porta,* it must be accumu-  
lated too largely there, and distend the Vessels. Besides, it can  
he proved by -sto; Experiment, that, in Man, the meseraic;.  
Veins receive-any humid Substance from the intestines.; and I.  
cannot perceive why the .SIZvthould rrot, in.like manner, enter-  
the.Pores of the. lacteal Veffeis, asheing more patent:.much  
less.canit.hessuppos'd, thatIheSrZs, heing mixidwiththe chy-  
lous Juice, should afterwards he .specifically separated by the  
meseraic Veins, .without an. Admixture os the Chyle. Besides,  
the. *Bile* JtseifStmixid in the Intestines, is in the small ones, by  
its Fermentation, .and intimate Solution, evidently chang'd, its-  
Crasis dissolv'd, its Bitterness laid aside, and, in short, it eeases  
th he real: *Bila.* ἀ 'Tis not, hewever, to he deny'd, that the  
sulphureous and spirituous Parts-of the *Bile,* heing resolv'd by  
Fermentation, again pass into’ the Blood, hut not sunder the  
Form of *Bile.* Nor do I deny, that when too much *Bile* is  
pour’d into the Duodenum, when the Stomach and Intestines’  
ate empty, as it. sometimes happens in preternatural Cases, a.  
Part of in may he actually received into the lacteal Veins. If'it.,  
he granted, that this may happen upon Taking too large a Qiian-'  
tity of hitter Medicines, I see mo Reason why itshould not hap-'  
pen, when loo much. *Bide* is accumulated.. .

Since I have already, shewn the Necessity, and great Useful--'  
ness,.Of.the\.3Ifr,'.and prov’d that it.isan universal and natural\*  
MedtcineIO the Constitution, it-evidently appears, that, when

this Liquor is faulty either in Quantity, Quality, of an undue  
Degree of Motion, our Bodies must sustain very considerable  
inconvehiencies, not only by having the Dispositions and Ten-  
dencies to Disorders, but the Disorders themselves, actually  
brought upon us. I must first then consider, whether too  
large a Quantity of *Bile* of a good Quality, and due Tempe-  
rament, can prove disadvantageous and hurtful to the Body ?  
To this I answer, thet in Countries like ours, where the Air is  
dense, where the Inhabitants drink. Malt Liquor, and where  
the Waters are not thin and subtile, a Soo large Quantity of  
good and laudable *Bile* cannot readily he generated. Yet I  
do not deny, but when People in, the Vigour of their Youth  
indulge themfclves wantonly in the Use of Wine, Aromatics,  
and sweet Aliments in the Summer Seaton, too large a Quan-  
Dry of *Bile* descending to the Intestines, and again mixing  
with the Blood, may do very considerable injuries ; especially  
if solid Aliments are sparingly used; For ’tis sufficiently known,  
thet the best active Medicines do Harm, if taken in too large  
a Quantity, which also holds with respect to Bitters. Thus  
also too large a Quantity of *Bile* gives too hot an Intemperies  
to the Blood, and disposes to Hemorrhages, disorderly and  
exorbitant Passions, Inflammations, Vomitings, Diarrheas,  
and Consumptions. But.it is more frequently faulty, with re-  
gard to its Deficiency, or . the Smallness of its Quantity; to  
which old Age,Childhood, a serous and phlegmatic Constitution;  
too llberal an Use of Opiates and refrigerating -Medicines, fre-  
quent Venesection, reiterated Purgations, and Loss of Strength  
hy the Shocks of fome long Difeafe, contribute not a littie.' A  
Defect of the Rise, as *Hielmont* has well observ’d, disposes to  
Cachexies, Dropsies, hypochondriacal Disorders, and very'ter-  
riblechronical Distempers. *Fernelius in Pathol,* very judici-  
oufly obferves, " That many have died, in whom, when laid  
open, no other Caufe of Death could' be discover’d, except  
“ that the Gall-bladder was entirely destitute of Rise.” And  
*Moebius* in his *Fundament. Pljystolog.* informs us, that in the:  
Bedies of three. Children, who died of Consumptions, there  
were not the least Remains of *Bile* to he observ’d. In the  
224th *Observation of Dec.* 2. *of the Miscellanea Illaturae Cur.*’tis shewn, that the Person who by frequent Vomitings of  
*Bile* drains his Body of thet Fluid, must necessarily die.

: A due Supply of Bile is greatly wanting in the Intestines,  
When the Oafice of the *Ductus Chekdechus* is either bloek’d  
up by a Stone, or contracted by Spastns. This Disorder lays  
a Foundation for severaivery terrible Symptoms, and gene-

. rally ends in a Jaundice; sor when the Bile is not allow’d a  
Passage to the Intestines, and its Generation in the Liver is  
still carried, on, it most of Necessity flow impetuousty, not  
only to the Gall-bladder, which it wonderfully distends, but  
also to the biliary Ducts, and Glands of the Liver, where, by  
the too great Distension and Aperture of the Pores,, it passes  
thiol the lymphatic Veffels into the Blood, and tinges the  
whole Mass of Serum with that yellow and disagreeable Co-  
lour, which appears all over the Surface of the Body. But  
that. in. this Case, ύ large Quantity of *Bile* flows from the Li-  
ver into the Blood,, we may conclude from this, that the  
Urine discharg’d is thick, resembles *Bile* in its Colour, and  
tinges Linen, with a saffron Colour. Costiveness is alfo, a  
Concomitant of the Jaundice, and white Feces are discharg’d  
with Gripes and Flatulencies ; there is a heavy Pain in the  
right Hypochondrium, and sometimes a very acute and-violent  
one, a Vomiting, .Naufea, Loss of Appetite, and Cardialgia,  
especially if a Stone be lodged in the Ducts, or if- the *Bile* be  
extravaiated; sor I have already observ’d, that the biliary Ducts

- are -very sensible and nervous. If then these Ducts .should he  
too much distended or vellieated , either by. a- Stone, of stag-  
natiog *Bide.,* the Stomach, the Oesophagus, and the Duode-  
num, are at the same time drawn into Consent with’ themi  
More Circumstances concur to prove, that: theofliary Ducts and  
its Aperture intothe Duodenum, may be continued; and that  
by this very-means a Jaundice, which however1 is easily carried  
off, is generated.-' In hypochondriac and-hysteric Patients, as  
also in thofe who labour under a violent Colic, An a severe  
Fit of linger, we often find a yellow Colour dispersed over all  
the Body, accompanied -with a heavy Pain in-the: Pit- of  
the Stomach, towards the-right-Hypochondrium, and- where  
the Duodenum, the Pylorus, and-thefe Ducts, lie;-for;the  
Orifice being either elofed «ρ by Flatulences, er- contracieilby  
Svasins, the *Bile* regurgitates -to the Blood. Antispasmodic  
arminative Medicines, and such as correct- the Acrimony of  
the Humours, are of all others hest calculated for ;the -Red  
moval of this Disorder. Hence, according to the Experiments  
*- of Sylvius,* Saffron, Opiates, Milk, and Emulsions of Hemp-  
seed, are of singular Service in this Case ; bub hot Sudorifics,  
as also stimulating and operient Medicines, are less proper.  
Burning bilious Fevers, and tertian Fevers, whether of the  
contioued or intermitting Kind-, are also frequently accornpa-  
riled with a Jaundice, which draws its Origin from no other  
Source, than either a Constriction or Obstruction of the bili-  
ary Ducts,; which lead to the Duodenum. -In; burning Fevers  
an inflammation of the Duodenum, and of thet Part of the

Pancreas which adheres to it, as also of the Pylorus, often hap-  
pens, especially when the Fever is brought on by the Suppref- ,  
fion of violent Grief, or the drinkina *of* cold Liquors. Hence  
it is not to be doubted, hut the Ducts being compressed by  
means of the Inflammation, Tumor, Pain, and Spasms of  
this Part, prevent the Afflux of the *Bist* to the Duodenum.  
Besides, ’tis known from Experience, that Poisons swallow’d,  
and the Bites of Vipers, or of mad Dogs, are frequently fol-  
low’d by the Jaundice; the Reason of which Phenomenon  
seems to be no other.than the violent Spasms and Inflamma-  
tion in the Stomach, and final! Intestines, which at the same  
time shut up the Passages of the *Bile* to the intestines.

When there is a violent Obstruction of the biliary Ducts,  
the Gall-bladder is on thet Occasion surprisingly distended  
by too large an Influx of the *Bile.* Then, by reafon of the  
Stagnation and Rest, the more thick and mucous Parts of  
the *Bile* are separated, collected, and lay a Foundation for a  
bilious Concretion. Besides, the thinner and more acrid Parts  
of the *Bile* ouse rbrof the dilated Pores of the Gall-bladder, and  
excite Gripes, Cardialgias, Vomitings, violent Constrictions  
of’the Stomach and Intestines, and Convulsions; Instances f -  
of this may be read in *the forty-seventh Observation of the first  
Century of* Stalpart Vander Wiel. Thet the *Bile* ma}’ ouse  
from the Gall-bladder, is confirm’d by *Tulpius,* where he  
brings an Instance of a pregnant Wbinen, in whose Body  
when laid open, besides an Absonis of the Mesentery broken  
during Labour, the Colon was found to float so freely in.  
yellow Bile, that it might have been taken out by Spooh-  
suls: Something of a like Nature, *D. Melum. Fribe Epsom.  
Nat. Curiose German. Dec. an.* 3. *Oof.* ; ioo. relates con-  
cerning a Coachman who died of a continual burning Fe-  
ver, in whose Body, when laid open, he says he observed, that  
from the Gall-bladder as yet entire, and larger then a Pi-  
geon’s Egg, the thinner Part of the *Bile* had ousil, and so  
drench’d and corroded the Parts below, above, and on every  
Side of it, tinging them of a fassron Colour, for two or three  
inches all around, that it was plain the Parts bedew’d and  
ting’d with it had become manifestly putrid; and thet, '  
besides the Substance of the Liver, it had corroded and  
render’d putrid a great Part of the Hypochondrium, the Gall-  
bladder remaining, at the same time, evidently found and  
unaffedled. . -ι

Besides, the *Bile* is highly disturbed in its Motion, either  
when the Gall-bladder is filled with a Mucus, or when a  
Stone is lodg’d in its-Neck’; for in these Cases it cannot re-  
ceive the hepatio *Bile,* which, of course, must flow into the  
Duodenum in a larger Quantity than it ought; and is by no  
means necessary, if the Stomach is empty ; And if it is'full,  
this *Bile* rs by no means sufficient ; bat a Supply of thicker  
and better saturated *Bile* from the Gall-bladder is necessary for  
the Purposes of Chylificstion, and for exalting the *Chyle.*And such a Deiced of *Bile,* at the'Time of Meals, generates  
many acid and viscid Crudities, which dispose to Gripes, Con-  
stfictions of the Belly, Cachexies, and Dropsies. I remember  
there was fome time ago a Sword-cutler laid open at *Jena,*who, for twenty Years before his Death, had been affected  
with violent Gripes, a Cardialgia, and Senfe -of-Heat about  
the Pit of his Stomachi His.Gall-bladder was of an uncom-  
mon Structure, and so large and long; that three thousand  
fin hundred and forty-six Grains of Rhe. coagulated partly in  
'rhe Form of Peas,; and partly in that of Shot, were found  
in ‘ is. Cafes of this Nature are very frequently accom-  
panied with Pains of the right Hypochondrium, Vomitings,  
Jaundice, Colics, Hysteric and Spasmodic' Disorders. And  
that a Droply frequently ensues such a Repletion of the Gall-  
bladder with 2. Stone, is confirm’d by *Cnsefelius, M. Na. C.  
Dec.an.* 3.' *Obsc.* g00. *Georgius'foramus* also, *Dec.* a. *art.*

6. *Qbse-* 194: from the Observation of another Physician,  
5‘ves the Case .of a certain Soldier, who died of a Dropsy in his .

reast, in whose Gall-bladder, upon opening him, there was  
he Stone found, which weigh’d half an Ounce and half a  
-Dram.. The Patient, during his Indisposition, complainid of  
so violent-a Pain in-the Region of his Liver, that be could  
neither stand upright, nor-walk, but was oblig’d till his Death  
posit in his Redin a-crooked or bending Posture.

:iIt fometimesv also happens, that the Rise is irregularly, pre-  
Ternatstrally, and. in too large a Quantity, thrown out of the  
Dtscis of the Liver into the intestine; upon which Occasion,  
especially if rt offends in Quality at the- same time, it creates .  
many Disorders,-and produces very terrible Symptoms. This  
Case principally happens after a severe Fit 0f Anger; for then  
theinuscular Fibres of the Gall-bladder, and biliary Docti, be-  
ing violently convulsed, not only a Bitterness in the Mouth,  
Naiisea, and Loss of Appetite, and Cardialgias, but also Vo-  
mitings or Gripes, and a bilious Diarrhea, are excited. On  
this Occafron we-areto observe, that where *ssoteBileis* immedi-  
ately discharg’d, the Case is void of Danger. But if the Anger  
has been suppressed and restrained, it often happens, that the  
agitated *Bile,* remaining in the Cavities of the Intestines, is not  
discharg’d, but reaches the Mass of Blood, and eenerallv ex-

cites Fevers, violent Convulsions, Spasins and Pains. But, in  
this Cafe, the greatest Injury is done to the Constitution, when  
hot Sudcrifics, or volatsic fpirituous Substances, are used, since  
by this means the impure *Bide* is plentifully convey’d to the  
Mass of Blood, and nervous P.;rts, and excites the most dan-  
gerous Symptoms. Concerning this, *Hippocrates* has left us  
a beautiful Passage in his Book *De Veteri Medicina.* "When;  
\*) fays he, a certain bitter Liquor, which we call yellow  
*" Bile,* is diffused, what Anxieties, servent Heats, and  
" Weaknesses, forthwith seize the Patient! But when we are  
" freed or purg’d of the Excels of this Liquor in due Time,  
“ either spontaneously, or by means of proper Medicines,  
“ then both, the Pain, and intense Heat, arc manifestly re-

mov’d. But when by Length of Trine, this Liquor is he-  
“ come crude, intemperate, and elevated above its natural  
" State, neither the Fevernor Pains can he allayed by all the  
“ Suggestions of Art: And indced what Madness, what  
" Despair, what Gnawings of the Viscera and Breast, are  
" thofe affiifted with, who abound too much with a stimula-  
" ting, acrid and asruginous Rise!” *Hippocrates* very justly  
observes, that these Efrects arc only produced by an intern-  
perate *Biles* for if a temperate *Bile* is by a Fit of Anger  
thrown into the intestine in too large a Quantity, it does not  
prove so hurtful, but rather a Remedy in cold Constitutions,  
as *Hippocrates* in a great many Passages observes.

I shall now inquire what Disorders may possibly arise from  
a tainted and perverted *Bile* convey’d into the Mass of Blood.  
Among these we may justly and principally reckon those Fe-  
vers called bilious, and continual double Tertian Fevers. And  
tho’ Fevers themselves generate *Bile,* yet'it is not to he  
doubted, but they may also arise, or be produced, from a bad  
and peccant *Bile. Hippocrates* concurs with me in this Opi-  
nion, who, in his Book *De Natura Hominis,* informs us, that  
most Fevers,efpecially acontinual Quotidian,Tertian and Quar-  
tan, arise from the *Bile.* For, first, ’ns not to he doubted, and in-  
deed we have the Sense of Antiquity full on our Side, that the  
proper Seat and Origin of most Fevers, especially those of the  
intermittent, and burning Kinds, and fuch as are called *choleric,*is in the first Region *of* the Body, that is, about the Pracor-  
ilia, the small Intestines, the Cavities of the Liver, the Spleen,  
the Pancreas, and the Omentum ; for, as in these Organs the  
Circulation is generally flow, impurities are generated, and  
corrupt -acrid Humours flow from the Pancreas into the In-  
testines, and generally excite not only the spasmodic and fe-  
verish Symptoms which accompany hypochondriacal Disorders,  
shut else the above-mentioned Fevers. For the Symptoms,  
which generally attend there Fevers, for the most part, make  
their first Appearancein the first Region of the Body, as evi-  
dently appears from the Inflation of the Stomach , and Ab-  
domen ; the Pain of the Back, the Nausea, the Vomiting,  
and the Constipation of the Belly. And because, when any  
highly sensible Part of the Body is affectid with Spasms, all  
the other Parts are readily drawn into Consent with it, hence  
the Horror, the Rigor on the Surface , of the Body, the Cold-  
ness, the convulsive Pains of the external Parts, and Pandicu-  
lations, draw their Origin from the Irritation of the *Prirna  
Via.* Besides, the Diarrheas, the bilious Vomitings, the red-  
dish high-colour’d Urine, the insatiable Thirst, the intense  
Heat, the violent Coughs, the Erosion of the Fauces, as also  
the Relief afforded by Refrigerants, gentle Evacuants, and  
such Preparations of Nitre as corredl and allay the Acrimony  
of the *Bile,* and, on the contrary, the Mischiefs produc’d by  
volatile, hot, oily, and acrid Medicines, are Circumstances  
which manifestly declare, that a corrupted *Bile* is lodged in  
the *Prirna Via,* and Mass of Blood; and consequently fully  
irove my Assertion. Besides, we may observe, thet young  
'eople, who have bilious Constitutions, and are prone to An-  
ger, are easily thrown into Fevers ; and that such as have for-  
- merly labour’d under critical bilious Diarrheas, if these do not  
return the following Year, are in their stead seized with ter-  
tiari Fevers, accompanied with a pungent Pain, and Gnawing  
of the Stomach, which cease when plentiful Discharges of a  
yellow bilious Matter by Vomit and Stool come on.

Among many others, there is a beautiful Passage of *Hippo-  
crates* in Confirmation of my Opinion, in his Book *de Affe-  
ctionibus.* " Where, says he, there is a Fever, the Patient has  
." an insatiable Thirst, a rough and black Tongue, and a bi-  
" lions Colour; bis Spit is bilious; he is cold externally, but  
“ pretty hot internally. Refrigerants are proper in this Case,  
" and the Disorder proceeds from agitated *Bile* pent up in the  
" Body.” -:

Fevers of this kind generally terminate on the seventh  
Day; nor does the Method, in which these Fevers terminato,  
less confirm my Opinion. for they generally terminato on  
the seventh Day, by a critical Jaundice, without any Seofc of  
Heaviness, Tension, or Pain, in the Right Hypochondrium,  
.especially in Patients labouring under continual tertian Fevers.

*Hippocrates,* in his Book *de JlAorbis,* justly observes, *that it con-  
duces very much to the Relief and Safety ofseverest Patients, and*

*such as abound with* Bile, *to have the Bile evacuated in dae  
Time. .*

The Antients, and particularly *Hippocrates,* as also, among  
the letter Physicians, *Ferurlius,* assign the Putrefaction of the  
*Bile* as the Reason why Fevers are augmented. Accordingly,  
the last-mention’d Author, in his *Patkolog. de Febribus,* has  
these Words: “ in Fevers the *Bile,* becoming putrid, acquires  
"‘a malignant Quality; and thet in the Beginning of the Ac-  
\*" cess, it rushes violently, and in large Quantities, into the  
“ Membranes of the Duodenum, is sufficiently proved from  
“ the dry Cough, the Ofcitation, the Suffocation, the An-  
"" xiety, the Distension of the Praecordia, the Pain, the

Nausea, the Vomiting, and the white thin Urine.”

And indced ’tis certain, that the *Bile,* when in a State of  
Rest and Stagnation, very easily hecomes putrid. Now nothing  
is more injurious fo the human Constitution, nothing more  
impairs its Strength and Vigour, nothing more disturbs and  
perverts, its natural Motions, than corrupt and putrid Substan-  
ces. For which Reason, we justly deduce the Origin of vio-  
lent Fevers in cachectic and phlegmatic Patients, from a large  
Quantity of corrupted *Bile* in the Primae Vhe. Besides, if  
putrified *Bile* is lodged in the Prima» Vise, it easily admits,  
multiohes, and renders active, the Contagion of the Plague,  
malignant and petechical Fevers, Small-pox, Meafles, *Dys-  
enteries,* and other contagious Diseases. Hence those Medi-  
nines which either by Vomit or Stool discharge the Sordes  
from the Ptimae Vhe, such as the *Acidulae,* purging Flax, Ni-  
tre, Spirit os’Vitriol, Spiritus Vitrioli dulcis, arid Elixir Pro-  
prietatis prepared with a proper Acid, prove excellent Pre-  
servatives against Contagion, and malignant Distempers! Nay  
farther, an impure *Bile,* generated afresh in a considerable  
Quantity, fays a new Foundation for the Paroxysms of inter-  
mittent Fevers. Hence the Reason is obvious, why Evacu-  
ante, which operate without inducing Spasins, and do not 'in.  
jute the Tone, of the intestines, such as the Piluhe amaras,  
neutral Salts exhibited in large Dofes, Mercurius dulcis, as  
alfo those Medicines which correol the too great Acrimony of  
the *Bile,* such as Preparations of Nitre, and there which  
prevent its Corruption, such as hitter earthy Substances, and  
*Peruvian* Bank, and such as strengthen the Tone of the ner-  
vous Parts, in order to prevent spasmodic Contractions in  
them, are of all others best calculated for removing the Caine  
and Ongin of intermittent Fevers.

I now come to consider a Phenomenon of the highest Im-  
portance in the Practice of Physic, which. is, thet, in all se-  
verish Disorders, the *Bile* is not only plentifully generated, ’  
hut allo vicious and peccant, by reason of the Dyscraiy of the  
Humours, and the disorderly Circulation of the Blood. Now  
this *Bile* necessarily stows into the intestines, and, if it is not  
evacuated, lodges in them, and passes into the lacteal Vesicis,  
and the Blond itself, by which means the most terrible Dis-  
orders are produced. For which Reaforr in all Fevers a solu-  
ble Belly, whether tis so naturally, or made so by Medicines,  
is a highly lucky and salutary Circumstance (a *most excellent  
Remark l)* Hence when Fevers of this kind are accompanied  
with Costiveness, we generally observe, that purple Fevers,  
Aphthae, inflammations *of* the Mouth and Fauces, and exan-  
thematous Eruptions of various kinds, appear; the Reason of  
which is no other than this, thet the corrupt and bilious Hu-  
mours generated during the preternatural and febrile Corrnno-  
tion of the Blood, coming into the Blond itself, are thrown  
out to the Surface of the Body. I must on this Occasion  
observe, thet the Purples, which appear principally in the Sum-  
mer, and generally seize People whose Fluids are impure, as  
those of pregnant Women, and scorbutic Constitutions, for the  
most part are, and which often appear on -the seventh  
or ninth Day of many acute Fevers, arise principally from  
bilious Humours fluctirating in the *Primae Viae.* For this  
Reason all Medicines which correcti Acrimony, and evacuate -  
gently, notouly guard against, but also remove the Purples,  
especially if gentle Diaphoretics, in Conjunction with proper  
Acids, are now-and-then duly interposed. Women. in.  
Child-bed are frequently seized with a purple Fever, which  
arises from ths Lochia not being discharg’d, and the Primae  
Vhe evacuated; and this Species of the Disorder, if not jodi-  
ciousty treated, proves mortal. ’

I now come to consider some other Distempers, whose Ori-  
gni is properly deduced from a Fault in the *Bile* ; and the first  
I shall mention is the Erysipelas, especially if the Patient is  
costive, and Transpiration is obstructsd; for nothing more  
corrupts the *Bile,* or more effectually stores it with impure  
and caustic Salts, than an Obstruction and Suppression of the  
usual cutaneous Evacuations. When, then, a *Bile* of mis cau-  
stic Quality is lodged in the *Primae Viae,* it excites Horrors,  
Anxieties, and Vomitings ; and being afterwards received into  
the Blond, is generally thrown off the third Day by the febrile  
Motion. Arthritic Pains, which, according to the Antients,  
draw their Origin from a hot Cause, are in like manner prin-  
cipally produced by a Fault in the *Prima Viae,* arising from a

vitiated *Bile,* which being convey'd.into the Blond, proves the  
Cause of all. these Pains, whilst the caustic Salts with winch tho  
*Bile* is impregnated, are fix'd upon the Membranes of the  
Joints. And this is the Reason why Fits of the Gout are for  
the most part usher'd in by Pains of the Stomach, Anxieties,  
Nauseas, and Loss of Appetite. Hence the Person who knows  
hew, on these Occasions, to evacuate the Primae Vise without  
raising, tumultuous Commotions in the animal Oeconomy, and  
at the same time to correct the Acrimony of the Humours, is  
the likeliest to succeed in removing, or at least mitigating,  
arthritic Pains.

It also deserves our greatest Attention, that Haemorrhages,  
which either happen at stated Periods, or such as are critical and  
symptomatica! in Diseases, have their chief Cause and Origin in  
the *Primes Via :* For in these. Flatulences, Coarctations, arid  
Constrictions, are perceiv'd ; a heavy depressing Pain is felt in  
the Hypochondria and Back, the Patient is costive, the extreme  
Parts are cold, and the Impetus of the Blood is afterwards did  
rected to some particular Part of the Body, whether the Head  
or Lungs, the Anus or the Uterus. But the Medicines which  
are best calculated for allaying and restraining the Violence os  
the Flux, are thofe which are gently purgative, but which, at  
the same time, preserve the Tone of the Intestines, and render  
the *Bile* temperate and balsamic ; fuch as Preparations of Rhu-  
barb, the Pilulne Becherianae, the Piluhe Maerocostinte, my  
balsamic bitter Elixir corrected, and volatile oily Saits frequently  
exhibited, but in small Doses ; but for correcting the Acrimony  
and V olatility of the caustic and corrosive *Bile,* Preparations of  
Nitre, and the precipitating Powders, as they are sometimes  
call'd, are os all others the most effectual.

Can it now be doubted, whether from these Circumstances  
we may not justly conclude, that a Vitiated *Bile,* accumulated  
in the Primae Vise, proves an Occasion and Stimulus to Haemor-  
rhages, in Constitutions disposed to them, by the preceding  
( Spasms of the Primae Viae ? And on this Occasion it must he  
observed, that periodical and stated Evacuations of Blood, aa  
also arthritic and catarthous Disorders, appear for the most part  
in the Autumn or Spring, or about the Months of *October* and  
*March* ; for which no other Reason tion be assign'd, than that  
the einiablu Tone of the Fibres is at these Seasons lost, in Con-  
sequence of the Inequalities in the State of the Atmosphere and  
Weather; and thus the Equilibrium of the Fluids andSolids, in  
which Health consists, is destroy'd; and that at these Times the  
- active excreinentitjoua Saits, which ought to be carried off by  
Transpiration, pass principally into the *Bile,* where, with their  
united Force, they descend to the Intestines, and produce  
numberless Disorders. -.. . ... \_.

But 'tis particularly to he adverted to, that by the Corru-  
ption. Acrimony, and corrosive Quality of the *Bile;* in Conse-  
quench of an Admixture of many stimulating heterogeneous and  
corrosive Parts, Violent Defluxions are excited in the Intestines  
themselves 5 for hence arise Diarrheas, Choleras, Violent Vo-  
mitings, Gripes, and Dysenteries. The Antients, as well as  
the Moderns, ascribe these Disorders to an aeruginons, porra-  
ceous *Bile,* which preternatural Colour sufficientiy manifests,  
that its due Crasis and natural State are destroy'd by an Admix-  
ture of some corrosive Acid ; for 'tis certain, that the *Bile* ac-  
quires a greenish Colour by the Addition of an Acid ; and green  
Feces in Children are manifest Proofs, that there is a large  
Quantity of Acid generated from the Milk they suck; for by  
Acids the natural Colour is destroy’d, and a Disease is brought  
on. *Hippocrates,* in his Book *de Natura Hominis,* has long  
ago condemn’d a greenish-colour'd *Bile,* in the following  
Words; " Green *Bile* stagnating near the Liver, where'tis  
" always in an Ebullition, is the Cause of Corruption, and a  
" troublesome inmate." Besides, practical and anatomical  
Observations sufficiently confirm, that a green *Bile* Is the Cause  
of the above-mentioned Disorders : Thus *Diemerbroclc* affirms,  
-that upon opening the Body of a Patient who died of a Violent  
bilious Diarrhea, in which the Excrements were green, he  
found the Gall-bladder filled with a deep-green *Bile,* and  
distended to the Bulk of a Hen's Egg. The fame Author in-  
forms us, that, in the Hospital in which he was concern'd, the  
*Bile* lodg'd in the Gall-bladders of some of the Patients, was,  
upon their being dissected, found highly green, aeruginous, and  
os a somewhat blackish Cast; nay, in a young Daughter Os  
Mr. *Ulyches,* who died of a Flux, in which the Excrements  
were aeruginous, and who was laid open by myself in the Pre-  
fence of several Physicians, I found the Gall-bladder distended  
to the Bulk of a Hen's Egg, and fill'd with aeruginous *Bile;*which Circumstance I have also observed in other Children who  
have died of a like Diarrhea, and in some to whose Lives the  
Cholera Morbus has put a Period. *Pechlinus,* in his *Exercitatio  
de Purgantibus,* affirms, that he has often found the hepatic  
*Bile* black and livid, or ns a leaden Colour. In a young Stu-  
dent of Distinction, and of a melancholic Habit, I observed the  
*Bile* in the Gall-bladder thick and black, like thet of a Fish ;  
which Circumstance I alte romemher to have seen in a *Maniac,*who aster his Death was laid open. By *Bontius de Medicina  
Indorum* we are inform’d, that ut an asthmatic Boy, who died

of a Dysentery, the Gall-bladder was found stuffed with a  
blackish Humour ; and this black Colour is to he ascribed to no  
other Cause than the large Quantity of an Acid, which, by in-  
ducing a Stagnation of the *Bile,* renders it in Process of Time  
black. The Reason is therefore' obvious, why in the above-  
mentioned Diseases, and in their Beginnings especially, gentle  
Emetics, Rhubarb ; as also the precipitating nitrous Powders,  
Milk, Whey, Oil of sweet Almonds, anodyne and emollient  
Clysters, and the Cremor of Ptisan, of all other Medicines  
prove the most effectual; for tho *Bile,* when rendered highly  
acrid and caustic, excites Symptoms like those produced by Poi-  
son. *Borriohius in Act. Med. Hasses Tom.* 3. *Obs.* 36. gives  
IIS the Case, of a Youth afflicted with the fame Symptoms which  
are generally produced by Poison, for an Erosion oshis Stomach  
by an highly acrid *Bile* ensued. The same Author writes, thet  
hot only the *Bide,* but other Humours affect the Body and Sto-  
mach in such a manner, that one would be induc'd to think the  
Patient hain taken a Dose of Poison, in which Case they un-  
doubtedly acquire a malignant Quality, by which they corrode  
and Vellicate the Membranes, and other sensible Parts, in the  
most Violent manner, and excite the most intolerable and rack-  
ing Pains. For a Proof that the *Bile* may become so corrosive  
as to raise an Ebullition like *Aqua-fortis,* when thrown upon  
the Earth, see *Barelli, Observat.* I. *Cent. o.. '* ι

From what has been said, I think it plainly appears, that the  
*Bile,* when in Its natural State, both as to Quantity and Qua-  
lity, is a Medicine, and an Humour of the highest Use and Im-  
pbrtance to the Body, and a Poison when vitiated ; and that  
.consequentiy the Health of Man may either be. preserved or de-  
stroyed by the *Bile*; and that for this very Reason, both in  
accounting for the Symptoms of Diseases, taking our Indica-  
tions, and prescribing the Means of Relief, we are in a parti-  
cular manner to advert to the State and Condition of this Hu-  
mour; and carefully observe whether it is faulty, either with  
regard to its Quantity, its Quality, and the Degree of its Mo-  
tion ; for certainly inany Medicines, which are very efficacious  
in the Cure or Diseases, operate no otherwise than by increasing  
the Quantity of *Bile* when deficient, evacuating it when  
redundant and superfluous, correcting it when Vitiated, and  
preserving its Motion to the intestines in. its due and proper  
State j for few Medicines act directly and immediately upon the  
Blood .arid Humousa, but most of them exert their Virtues and  
Efficacy upon the Primae Viae, ‘where, in a secondary manner,  
they Correct the virions Hunjours, of which the *Bile* is the prin-  
cipal, which are the direct and formal Causes of Diseases. This  
Observation holds good in 2 particular manner with regard to  
Emetics, Laxatives,- Absorbents, Acids, Preparations of Nitre,  
temperating Medicines, Emollients, Bitters, fix'd Salts, Che-  
lybeates. Corroboratives, and others of a like Nature. *Hesse\*  
man. ’ .*

The above-quoted Author, - in another Part of his Works,  
makes the ensuing Remarks relative to the Bile and its Organs.

The Blood is conveyed to the Liver by the Vena Portae,  
which heing a Venous Vessel, the Motion os the Blood through  
it must of course he-flow. The Vena Cava carries back the  
Blood to the Heart. The hepatic Artery conveys Nourishment  
to the Parts of which the Liver is composed ; and the biliary  
Ducts carry the secreted Bile partly through the Ductus Cholo- χdochus to the Duodenum, and partly through the Cystic Duct  
to the Gall-bladder; for indeed the only Use and Design of the  
Liver is to separate the sulphureous, torrefied, and lixivia! Parts  
of the Blood and Serum convey'd to it through the *Vena Pcrtce ,*so that the Antients were mistaken when they believ'd, thet  
the Liver was the principal Laboratory of Sanguification.

The Bile, which is a thick Humour, and heavier than the  
Blood itself, requires a mechanical Apparatus of a particular  
Kind, for its Secretion. - -

. For the Secretion of a thick Humour, 'tis necessary that the  
Blood flowing into the secretory Organ should be think, that a  
fine Liquid may not pass in too large a Quantity through its  
. capacious Ducts. \*

AS the Separation of thick Humours requires pretty large Ca-  
nals and Ducts; and as a thinLiquid passes through these with the  
same, and even greater Ease, than a thick oney hence, left too  
thin a Lymph should be secreted, it was necessary that the  
Blood should in a great measure be previoufly deprived of its  
thin lymphatic Part, which is done in the Kidneys, the Sto-  
mach, the whole intestinal Tube, the Omentum, and Pan-  
creas, through all which Parts the Blood must necessarily pass  
before it reaches the Liver.

That the Bile may be secreted in the Liver, 'tis requisite that  
its Motion and Progress through that Organ should be flow.

\* For in general all the Secretions and Excretions are more ad-  
Vantageoufly carried on by a flow than an accelerated and rapid  
Motion ; becaufe, during the former, the fluid Parts are more  
easily separated from those which are more thick and solid, and  
the fine aqueous Parts are carried into the lymphatic Vessels, of  
which there is a great Number in the Liver; and those that are  
thicker are Convey'd through the biliary Ducts.

In order to form a clear Idea of the Separation of the thick  
bilious Humour, we must carefully attend to the singular Stru-  
Sure of the Vena Cava, and its Connexion with the Vena  
Portas, since in these there is a peculiar Kind of Mechanism,  
not to be observed in any other Parts of the Body.

For though in other Parts the Extremities of the Arteries are  
joined to those of the Veins, and form one continued Canal;  
yet mis does not happen in the Liver ; for the minute Ramifica-  
. tions of the Vena Cava are inserted into the Sides of the Vena  
Portae in such a manner, as to form right Angles with them;  
for no other Reason, than that the Blood, which is thinner than  
the Bile, may he forced into the Orifices of the Vena Cava, just  
as site Chyle is into the Intestines, after it has left the thick  
*Bile,* which is then convey’d into the *biliary Ducts,* adjacent  
to the Vena Porne, and thence forced through the Ductus  
Cholodochus, and Communis, to the Duodenum, and through  
the Duolus Cysticus to the Gall-bladder.

Though the *Bile,* in Consequence of the Ingredients of which  
it is composed, is an Humour disagreeable both to the solid and  
fluid Parts of the human Body, and in this Sense eXCre-  
mentitious, yet, with regard to the Elaboration of the Chyle,  
\*tis highly useful and necessary, and consequently ought not to  
he discharged from the Body, till it has exerted itself to that  
Purpose. '

The Expansion of the Stomach by means os theAlhnents, and  
the Fermentation they undergo in it, very much assist the Con-  
veyance of the Bile from the Gall-bladder to the Duodenum.

The Situation of the human Gall-bladder is very remarkehle,  
since its Neck is higher than its Bottom *., for* which Reason the  
Ascent of the *Bile* is very difficult, especially since it must flow  
from a wide to a narrower Place. Then again, because the  
Dubins Cholodochus passes a long Way between the second and  
third Coats of the Duodenum, and at last opens with a round  
Orifice into its Cavity, the *Bile* cannot at all times be discharged  
into the Duodenum, but only when the Intestines are relaxed,  
and the Gall-bladder compress’d by the right Side of the Stomach,  
when rendered turgid by the Quantity and Fermentation of the  
Aliments.

The larger the Quantity of Aliments taken into the Stomach  
‘ is, the more it must he expanded, and consequently the greater  
theCompression of the adjacentGall-bladder must necessarily be ;  
for which Reason the Bile must on these Occasions flow plenti-  
suliy to the Intestines. ' .

ft is a Circumstance deserving our Attention, that in Ahi-  
mils whofe Stomachs are become flaccid by long Fasting, the  
Gall-bladder is turgid and distended, whereas, after they heve  
taken a Urge Quantity of Aliments, it is observed to he only  
half-full. It is also remarkable, that in human Fetuses the  
Gall-bladder is found distended with *Bile,* because in them the  
Stomach is collapsed, and free from Expansion. *Haffman.*

There are some farther Circumstances relative to the Bile, of  
tho much Importance to be omitted.

The Bile, when out of the Body, is highly bitter, and the  
most acrid of all the animal Fluids ., it is neither of an alcaline,  
nor an acid Quality. It resists Aceseence, and conveys the fame  
Quality to other Substances with which it is mixed. It tends  
very much to Putrefaction, which it promotes, when added to  
other Substances disposed to it. It very stoon mixes-with Wa-  
ter ; and when inspissated over a gentle Fire, it diflolves, if ex-  
posed to the Air. It does not burn in the Fire, unless it he  
previously dry’d. It renders Oiis, and oleaginous Substances,  
.miscible with Water. If it is rubb’d with any tenacious Sub-  
stances, such as Resins and Gums, it resolves and attenuates  
them. It is coagulated by Fire, Alcohol of Wine, acid Spirits,  
and Extracti of Galls ; See *Boerhaave Clrsm. Vol.* I. *P~* 343,  
732, 736, 842. and his *Iast'itut. Med. Sect.* 99. I shall now-  
take a brief Survey of the several Experiments which the Cu-  
. rious heve made on the Blle of various Animals. When the  
Bile, then, of an Ox was put into different Vessels, and mixed  
with various Liquors, in order to discover what Changes they  
produced, either in its Consistence or Colour, it was found to.  
hold universally, thet Spirit of Sal Ammoniac produced no Co-  
agulation in it, tarrarated Spirit of Wine a very small one, pure.  
Spirit of Wine 'a somewhat greater in some Parts of the Bile,  
and Oil of Tartar per Deliquium none at all. Spirit of Vine-  
gar, .and Vinegar itself, produced large and fibrous Concretions  
rn it. Spirit of Verdegrife and Sulphur, Oil of Vitriol, Spirit  
of the Butter of Antimony, Spirit of Honey, and Extraci of  
Galls prepared wim common Water, produced a very sum.  
Coagulum in the Blle; her Spirit of Nitre a very small one, and  
Aqua-fortis but a moderate one. The express’d Juices of  
Monkshood or Hemlock produced, no Coagulum in it ; and a  
Mixture of the Juices of Deadly Nightshade, Onion, Horse-  
radish, and Vipers-grafs, produced a very small Coagnium with  
in No Condensation or Change at all was produced in it by  
the Juices of Tansey, Sage, Mint, Masterwort, Angelica,  
Lavender, and Baum; but a small Condeofation and Change  
were produc’d in it by the Juices of Succory, Stnalisge, Bistort,  
Mugwort, and Pilewort. When all these Liquors were mix’d  
with the Blle, and kept till the neat Day, whatever Concre-

tions were produced were fibrous and sight; sor they floated in  
the Liquor, and contained nothing solid: But the Parts not  
condens’d were serous like Whey, or the Serum of rhe Blood.  
Besides thofe coagulated and ferousParts, feme pinguiousPortions  
adher’d to the Sides of the Vessels. The Concretions produced,  
by Spirit of Nitre, or Aqua-fortis, were alone not fibrous, but  
divided into Grumes and Froth. The Coagulum produced by  
the Extract of Galls seemed to be the firmest of ail, and almost  
free from all Serosity, which being condens’d separately, asiaini’d  
the Consistence of a Jelly. *Du Hamel Hiest.*

*Ox’s* Gall mixed with Powder of Alum, by shaking them  
gently together, excited a perceptible Effervescence. The  
Mixture became turbid, but the Colour of the Bile remain’d the  
fame it was hefore, and a Precipitation was insensibly made.  
If this Mixture is exposed to the Rays inf the Sun, the Liquor  
becomes clear, and assumes a reddish Colour. If five or six  
Days after this the floating Sordes and the Sediment are sepa-  
rated, and the elear Liquor again exposed to the Heat of the  
Sun for three or four Months in a olofe-stopp’d Phial, it deposits  
still another Sediment, and gradually exhibits on its Surface a  
white, hard, and sebaceous Fat; but the Liquor itfeif assumes  
a yellow citron Colour, and a Smell resembling that of boiled  
Crabs. To one Pound of the Blle there was half an Ounce of  
Alum added, and the Quantity of the Matter precipitated *ex-  
ceeded that* of. the Alum; which is an evident Proof, that some  
Part of the Bile, that is, its earthy Portion, had been carried to  
the Bottom of the Vessel along with the Alum; but we may  
reasonably conclude, that the Fat floating on the Top was sepa-  
rated from the Bile. *Hamberg* has described this .Experiment,  
and at the seme tube taught us a Method of preparing a Medi-  
cine from it, when in is freed from its earthy and pinguious  
Parts, by being exposed to the Heat of the Sun for at least two .  
or three Months. The Design of the Medicine is to remove  
those Blemishes in the Face, especially the Nose, which arise  
from a thick and unctirous Matter collectsd and treasured up in  
the cutaneous Ducts; and which, when express'd, are of the  
Form of a Worm, and become black in the Air. The Method  
*of* preparing this Medicine is as follows; \*

Mix half a Dram of Bile prepared aS above, .with an equal  
Quantity of Oil of Tartar per Dellquium ; then adding an  
Ounce of River-water, keep it for Use in a close-stopr  
. Phial. ...

The Method of applying it is to dip the Point of the Finger  
in it, and anoint the Part affected *seven* or eight times a Day.  
*Mem. Ac.* A *Sc. A.* I709.

. I shall now mention some of the Experiments try’d on the  
Bile of an Ox by *Baglivi. . .*

Ox-gall then, upon the Admixture of Oil of Tartar per De-  
liquium, was concreted into a kind of fibrous Coagulum with a  
Froth, but its Colour remain’d unchang’d. The Bile of an Ox,  
upon an Admixture of Mercury sublimate, was forthwith co-  
agolated, and assumed an obsenre greenish Colour, which daily  
increased. Ox-gall, mixed with Spirit of Vitriol, first produced  
a great Froth, and then coagulated into a greenish Mass, the  
Acidity and Greenness remaining, unchanged. Τwenty-sour  
Hours after there was a green thick Sediment sound,in the Bot-  
tom of the Vessel, but the Tasteof the Liquor remained the  
some. The Bile of a Calf newly kill’d immediately quitted its  
yellow Colour, and became green by- the Admixture of-Oll of  
Vitriol, and retained that Colour for three Days: It was ren-  
der'd less green by Spirit of Nitre. With Oil of Tartar the.  
same-Blle was in a great measure coagulated into white .Clots,  
which floated up-and-down in the rest os the Liquor. *Bagliv. -:*

Six Pounds of Ox-gall upon Distillation, yielded almost eighty  
Ounces of Liquor, three Ounces and two Drams' of Oil,  
twenty-four Drarns of volatile Salt and five Drams of fixed  
Salt. *Hast. Ac. R. Sc.*

*Hartmanm^dc* the Analysis ofO.x-gall in .two different man-  
ners: And, first, for Distillation from a Retort, he took nine  
Ounces and five Drams of .Blle,; and hiving mixed them  
with Sand, he put the Whole into .a. Retort; and first of oll  
seven Ouncesof a watery-coloured Phlegm wereyielded f after,  
this there succeeded another Phlegm of a milky Colour,, mixed  
with-an Oil, whicti, taken together, ;amounted to two Ounces  
and three Drams. This Oil was of two Kinds ; for One Part of  
it floated on'the milky Phlegm, and another subsided to the  
Bottom of the Vessel: Rut after fame Weeks the greater Part  
of that which floated.on rhe Top fell to the Bottom, at which  
time .it was observed to assume a Lentor, not unlike, that of  
Pitch. J The-Form of a volatile Salt was not to be.difcovered,  
tho’ the Smell of it struck the Nostriis. From the Caput Mor-  
morn calcin’d,- seven Grains ofa *fixed* Salt were procured. A  
dusky, black, and almost insipid Matter, without the least De-  
See of Tenacity, adher’d to the Neck of the Retort. The

istillation of Ox-gall by the Alembic, be managed in this  
manner : First he took -one.Pound three .Ounces, and two  
Drams of the Gall.

- The Phlegm yielded by this was all *cis* one Colour, that is,  
tin aqueous one ; and it diffused a sulphureous saline Smell, re-  
fembling that os the milky Phlegm yielded by the Retort.

Nor was the Phlegm os any other Smelf which was distil'd  
afterwards with the Oil, and which was not os a milky Colour,  
but rather resembling that os Fire, when the rest os the Mass  
appear’d thick and black in the Alembic.

The Weight os this Oil and Phlegm together amounted to  
an Ounce and an half: But 'tis something remarkable; that  
the Oil yielded by this Distillation was not like that yielded by  
the Retort ' os two Kinds; sor it constantly floated on the Sur-  
face os the Phlegm, and retain'd the Form of a fluid Osh -  
i There was no resinous Colophony,.-but-a dusty black Caput  
Mortuum remain’d.

Volatile Salt, which would haveedherfd' to the Alembic, in  
Sts proper Form, and shewn sta pure saline Spicula, did not at  
all appear. - \* ’

One Dram and thirteen Granis os fix'd Salt were procured  
from the Caput Mortuum. - *Burggsoav. Lex.'-*

*Baglitsi* makes the following Experiments on Sheeps - Gall.  
I divided; says he. Sheeps Gast into several Cups one Morning,  
when the Weather was rainy.. Its ungrateful, and, as it were,  
urinous and putrified Smell irritated my Throat, and created a  
small Pain in my Head. The *Bile* itself was transparent,. and  
*of* a Colour resembling that of Tobacco. The Fingers which  
were employ'd in handling it were clean and white, and the  
Skin somewhat corrugated, just as when we wash our’Hands  
with Soap.

.. I. The *Bile,* mixed with rectified Spirit of Wine; -produced  
no Fermentation whilst the Substances were mixing. Twenty-  
four Hours after, it was of a brownish Colour. . in the trans-  
parent brownish Liquor, white small Filaments floated con-  
fusedly ; and at the Bottom of the Velse! there was a farina-  
ceous Sediment. The Bitterness was the same, or rather fome-.  
what increased. On the third Day-it was the fame. By the  
Addition of common" Water the1 brownish Colour became  
somewhat more clear. On the twelfth Day the Smell was grate-  
ful, the Liquor transparent, but its Colour brownish ; and in  
the Bottom os the Vessel there was a Sediment.

II. 011 of Tartar, added to the *Bile,* produced no new Phe-  
nomenon upon their being mix'd. Twenty-sour Hours aster, it  
assumed an obscure-brownish Colour, but the Liquor was entire-  
ly limpid and transparent; and in the Bottom of the Vessel  
there was a final! Quantity of a white Sediment. Its Smell  
resembled that of over-roasted Eggs. The Bitterness was the  
same, but rather more intense. On the third Day it was still  
the same ; and the Addition of common Water produced no  
new Phenomenon. On the twelfth Day the Smell resembled  
that of Lime. There was a small Sediment at the Bottom ;  
the Liquor above it was transparent, and its Colour sbrnev/hat  
greenish. . . ..

Hl. Salt of Wormwood, reduced to Powder, and added to  
the *Bile,* at first produced no Change in it. Twenty-four  
Hours aster, the Salt lay entirely undissolved at the Bottom.  
The Liquor itself was somewhat transparent, and its Colour  
was darkish, resembling that of Tobacco. It had the same  
urinous and putrid Smell, the fame Bitterness ; but soon after,  
becoming more acrid, and its Bitterness being much increased,  
a small Quantity of it, which I tasted, excited a Violent Vomit-  
ing. By adding common Water its Colour was changed into  
a Dark-yellow. On the third Day after the Addition of the  
Water it became somewhat fetid, hut its Colour remained the  
fame. The Salt was not as yet dissolved in the Bottom os the  
Vessel, but remained without any Alteration for fifteen  
Days. . . - \_ . - -

IV. Crude Alum, reduced to Powder, produced no remark-  
able Change in is, when first mix’d with it. The second Day,  
however, the Liquor was highly turbid ; its Colour obscure, but  
transparent, and greenish towards. the Surface. Towards the  
Bottom os the Vestel it was viscid, dense, and a cineritious Por-  
tion settled at the Bottom. Its Smell resembled that of salted  
Fish. Its Bitterness was somewhat diminish'd. On the third  
Day it was the same in every respect. Upon an Admixture of  
common Water it immediately acquired a Colour resembling  
that of Butter. On the twelfth Day the Liquor was transpa-  
rent, hut its Colour remam'd the same ; and in .the Bottom of  
the Vessel there was a brownish Sediment.

V. Twenty-sour Hours after an Admixture of Cinnamon-  
water, there was a white, cineritious Sediment in the Bottom of  
the Vessel; but the Liquor above it was transparent, and of a  
brownish, but not very dark Colour. The Smell was the same  
with that os the Cinnamon-water, which had proved more than  
a Balance sor the urinous putrid Smell os the Sheeps Gall. The  
Bittemess was grateful enough to the Taste, and not very pun-  
gent, but resembling’ that which I observed produced by the Salt  
of Wormwood. The third Day after, it was the fame in all  
respects. Upon an Addition of common Water, there was no  
Change produced, in its Colour; but the Smell became highly  
grateful: On the twelfth Day the Liquor became turbid, and  
its Smell disagreeable.

VI. Tincture of Cantharides *exiraOesl* upon hot Ashes, with  
Common .Water, and added to the *Bile,* produced no Change  
when first min’d. The second Day aster, there was "a small  
Quantity of a thin sarinaceous Sediment found at the Bottom ;  
but the Liquor about it was transparent, and of the; Colour of  
Tobacco. Its Smell was ungrateful, like that of the Leaves of  
Dwarf-elder bruised. Its Bitterness was not very ungrateful ;  
and on the third Day its State was the same.'" Upon an Addi-  
tion of common Water nothing new happen’d. ' On the  
twelfth Day all the Parts of the Liquor were turbid ;.it assum'd  
a feculent reddish Colour, and an ungrateful Smell.' .. ./

VII. Upon an Addition of common arid Spirit of'Salt, there  
wan a Fermentation, and a Change of the Colour, into im.Ob-  
scure-yeIlow, produced. - On the'second Day-the Colour was  
highly green, and in theiBottonr of the Vessel there was a gross  
white Meal. The Smell was ungrateful, and resembled that  
of salted Fish. Its Bitterness was ungrateful, and a small Quan-  
tity of in, being tasted, excited a kind of inclination to vomit.  
On the third Day it was the same in every respect. Upon, an  
Admixture of common Water, the Liquorbscame more transe  
parent, and somewhat whitish. On the fifteenth Day the Smell  
was the same, but somewhat less intense.' In the Bottom there  
was a greenish Sediment, and the Liquor above it was green  
and transparent. - u. . .. \ S \_ ...»

VIII. Spirit of Hartshorn, -added to the *Bile,* immediately  
changed its Colour into a beautiful, hut somewhat obscure Yel-  
low; and there was no Sediment to be seen at the Bottom.  
The Smell of the Spirit proved more than' a Balance to that of  
the Bile. . Its Bitterness was grateful, almost like that produced  
by the Cinnamon-water. On the third Day the Colour of the  
Bile, its Transparency, and Smell, remam’d the fame'thl-the  
eighth, when, upon an Addition of common Water, all its  
Parts became clearer. On the twenty-fifth Day, - by adding  
warm Water, the Liquor became turbid and foul, and assum’d  
an ungrateful Smell, and a Colour resembling that of the Yolks  
of Eggs. : . .. .

IX. Eighteen Hours after an Admixture of Spirit of SaI  
Ammoniac, it assum’d an universally transparent beautiful  
Colour, like that of a Ruby. The Smell os .the Sal Ammoniac  
was stronger than that os the *Pile.* The Taste, was gratefully  
bitter, like that produced by the Cinnainon-water and the Spirit  
of Hartshorn. On the third Day it was in the fame State ; hut  
its Colour was a little more obscure, and continued so till the  
tenth Day ; when, by an Addition of common'Water, it  
assumed a beautiful transparent Colour, like that os pure White-  
wine. After which, by reason of the Admixture of the Wa-  
ter, it became turbid, foul, and assumed an ungrateful Smell. ’

X. Upon an Addition of Spirit, of Nitre, it was immediate-  
ly changed to a Colour resembling that os. the Yolks of Eggs,  
and a gentie Fermentation was produced. On the second *Day*its Colour was intensely green, and rather more so then when  
mix’d with Spirit of Vitriol. Its Smell was acid and ungrateful,  
and in the Bottom of the Vessel there was a thick white Mass.  
The superior Part of the Liquor- was green, and somewhat  
transparent and limpid ; but its Taste was acid'and bitter. On.  
the thud Day it was the same in all respects; but upon the.  
Addition of common Water, its intense Greenness was some-  
what abated. On the twelfth Day there was a large Quantity  
of Sediment at the Bottom, and the Liquor above it was trans-  
parent, but of a high-green Colour, which- remained the  
feme. . -

XI. Upon an Addition of Spirit of Vitriol, it was changed  
from its natural brownish Colour to one resembling that of the  
Yolks of Eggs, and a small ebullition was produced. On the  
second Day all the Parts of the Liquor were become turbid, and  
gross Filaments floated confusedly ip it. Its Colour was every-  
where greenish, and somewhat incimed to an azure Blue. Its  
Smell was like that of salted Fish, and its Taste entirely acids  
On the third Day its State was the same in every, respect: Its  
acid Smell strongly affected the Nostrils. ..at., S'

XII. When the *Bile* was mix’d with- Aqua-fortis. Bubbles  
were immediately produced, which forthwith became green,  
and a kind of azture-colour’d Scum floated on the Top os she  
Liquor. Twenty-four Hours after, its Smell was highly pene-  
trating and acid; and the Liquor itself being highly turbid, a  
gross sarinaceous Sediment was observed at the Bottom of theVessel. In the Middle the Liquor was somewhat transparent ;  
on the Surface there floated a gross kind of Mucilage,Os a white  
cineritious Colour; and a Froth and Bubbles appear'd about  
the Sides Os the Vessel. On the third Day the Appearances  
were the same, except that the Smell resembled that os acid  
and corrupted Milk. On the twelfth Day its State was **the**same.

XIII. By an Addition os Vinegar the Colour os the Bile was  
immediately changed into that of the Yolks of Eggs, and ren-ο  
der’d enthely thick. On the second Day there was a gross  
sarinaceous Sediment deposited at the Bottom of the Vessel:  
The Liquor above this Sediment was’ of a greenish Colour, but  
turbid. Its Smell was urinous and putrid, like that os salted  
Fish; and its Bitterness was somewhat abated.- On the third

**Day It was in the same State, and remain'd so till the ur-  
teenth. - '.**

XIV. Common Water, added to the *Bile,* changed its Coe  
lout immediately from a dark-brown to a ycllow; but it was  
not so pellucid as before. The sharp Smell of the *Bile* was the  
same, but rather more intense. Twenty-four Hours after, in  
had the same urinous putrid Smell, and its Colour became a  
little greenish. Upon anAddition of a small Quantity of fresh  
Water the same greenifn Colour remain’d, but the Bitterness  
was abated. On the thud Day the Liquor was turbid ; and on  
Its Surface there was a Pellicle, like that which usually stoats on  
corrupted Liquors r It was alfo highiy fetid.

XV. This *Bile,* when mix’d with moderately fweet Whites.  
**wine,** hecame immediately torbid, and its Colour was changed  
into thet of a foul Yellow. The Acrimony of the Rise, which  
before acted so forcibly on the Nostrils, was immediately abated.  
Twenty-four Hours after, its ungrateful Smell ceased altogether.  
In the Bottom there was a Subitanee like a white Meal depo-  
sited ; and the Liquor above it was yellow, transparent, and  
intensely bitter. On the third Day it was in the fame State,  
bur without any fetid Smell. On the twelfth Day all the Parts  
of the Liquor became fetid and turbid. *Bagliv. .*

- Five Pounds of Hogs Gall,. newly taken from the Animals,  
Upon Distillation, yielded almost feventy-one Ounces of various,  
**had** those sulphureous Liquors ; and five Ounces and an half of  
Oil: Among all which there was an Ounce and an half of a  
thick. and compact Matter, like Colophony or Bitumen ;. and  
**two** Drams of a fix’d Salt. These Liquors remain’d, without  
**. a** Sediment, neither did they become fetid, nor undergo any  
Change. When digested together, by a gentle Heat, for thir-  
ty-one Days, they lest sour Ounces of their Weight; And the  
four Pounds and eleven Ounces which remain’d, lest between  
four and five Ounces of a thick Sediment in the Bottom of the  
Vessel; and the Liquor above this Sediment was pellucid, and  
**Of** a greenish-brown Colour.. *Du. Hamel Hast. Ac. P. S.*

*- The Bile of ά* human Body, subjected to Distillation withia  
gentle Firs, immediately yields a Phlegm, and a thick and  
quickly inflammable Resin remains at the Bottom of the Vessel.  
By increasing the Fire there afeends a moderate Quantity of a  
Volatile acrid Salt, = whicti leaves behind it, in the inferior Part  
of the Vessel, a large Quantity of a fix’d, acrid, and lixivia!  
Salt, in form of a dark-colouPd Mass, of a highiy acrid Taste,  
and penetrating Smell. Human Bile, when mix’d, with Acids,  
especially those furnish’d by the Mineral Kingdom, produces a  
gentle Effervescence, and is very sensibly, changed as to. its  
Colour. Upon an Admixture of Spirifof Vitriol, or that of  
Sulphur, there is a gentle Ebullition produced in it, and it be-  
comes more or less green ; letting fall at the seme time an acrid  
Sediment to the Bottom, and losing fomewhat of its Bitterness.  
**On.** the contrary, volatile, alcaline Substances not only render  
**it** more thin and transparent, butasso increase its yeliowLemon-  
colour. *Bagliv.*

From the above-enumerated Experiments it plainly appears,  
that the *Bile* is an Humour composed of an Oil, a Salt, ami  
Water. It may therefore be consider’d as a liquid Ahimal Soap,  
so that it is of an abstergent and resolvent Quallty. That it is  
so, the Practice of some Tradesmen is a sufficient Proof; sor  
Dyers of Cloth, in order to take.out the Grease which.sticks  
to the Wool, and hinders, the Adhesion oftheColour, use Soap,  
or putrid Urine, after it has assumed an alcaline.Nature, or a  
Lixivium of some fix’d Alcali. But they may, with equal.Suc-  
cess, use Ox-gall' for the sanie Intentioni Painters asso use the  
Bile of Animals for miking and dilating their Paints. It disco-  
vers its Efficacy to he: the. same in Medicine, where a sapona-  
ceous Quality is.reqain’il, or where the intention is to absterge,  
where the sluggish Vessels are mi be stimulated, where a tena-  
clous Substance is to. be resolved, or. a viscid one attenuated  
*(see Boerh.Apla fa.* 5.). Besides, as *Bile* has for an Ingredient  
a.Salt,.which, the? norAn Alcali, yet inclines, and, as it were,  
approaches to it, like other animal Salts, it must of course  
prove an. efficacious Medicine, in.those Disorders, where an Acid  
is to he resisted and corrected; So that it must be. beneficial to  
Bedies which are. prone to generate Acids, to such as abound  
with mucous and pituitous Humours, and to those who lead a  
sedentary Life, or labour under Loss of Appetite. It is also  
added to purgative Medicines, with a View to lubricate, stimu-  
late, and refolve. The Method of using it is to dry it asittle,  
and.make it up into final!Tills: Three or sour Grains, may he  
given.sor aDofe to Adults ; but, for infants, one Grain of it is  
sufficient for a Dose. . Itfeems.to .he owing to this saponaceous  
resolvent Quality, that.a.few Drops.ofthe *Bile* extractedfrom  
*' R* heing. Dog, and mix’d with the. *Anua Epileptica, of Longius,*produce the desired Estedt in the Cure of the Epilepsy. See.  
*Act. Hiofsu Val:* 3: *Obseao.* From these Circumstances, we.are  
enabled to discover the Reason, why *Boerhaave* recommended  
the Use of *Bile,* not only against a spontaneous Gluten, or.  
kiseid. Humours in general; but more especially prescrib’d it  
against, those Coagulurns form’d in the *PrinuaVia.* of Chil-  
dren- ’ . ' - . . .

- For this Intention he recommends the Galls of Quadrupeds

and Fish, especially these of the Pike and Tel. His Method  
of prescribing is as follows: ’

Take os the Galls of a Bull and of a Pike, each sour Drams-  
let them evaporate slowly, on a gentle Fine, till they have  
acquired the Consistence os Honey ; then add a sufficient  
Quantity of thfe Powder of fresh *Arrem-root.* Make into  
Pilis, weighing three Grains each, to he cover’d with Least,  
gold. Let the Patient take one of these in the Morning,  
. at Noon, and at Night, an Hout before bis Meals.

. To this Clefs helongs also the Stone coll’d, by the *Spaniard  
Pedra del Pores ,* an Infusion of which, in dishllhi Water of  
Carduus Benedictis, or *Alienist)* Wine, may be drank, taking  
two or three Ounces for a Dofe.

Το this Class also belongs *Helmonsm* Medicine, prepar’d of  
the Liver and Gall of an Eel, reduced to a Powder by a gentle  
Fire-; one Drain of which is to be given, with three Ounces of  
*Rbenise* Wine, for a Vehicle. *Boerh. Mater. Mede*

In *Page* 228. of the fame Work, he prescribes a Clyster in  
the following manner, which he recommends aquinst Disorders  
of Children, arising from a caseous Coagulation of the Milk  
they feed on:

Take of Ox’s Gall, half a Dram . of the Honey of Met-  
cury, half an Ounce ; of distil’d Mint-water, an Ounce  
and an hast: Mix up for a Clyster.

Blle may also be used' in deterging glutinous sordid Ulcers.  
It may also be successfully used in Disorders of the Eyes, where  
Deterging is indicated as proper : For which Reason *Pliny,  
L.2,8. C.* I. informs us, that Suffusions are cured by the Gall .  
of a Man. Sec *Dioseor. L.* 2. *C.* I7. *Btrnuller* informs us, :  
that the Gall of Fish, especially that of the Sea-lamprey and  
Pike, the distil’d Water of it, and its Essence, are proper for  
curing the *Pannus Oculi,* or thet Disorder of the Eyes which  
is caused by an Inflammation in the small Vessels of the *Adnata,*(fee PANNUs) ; and thet the Secret of *Burrhus,* for this Difor-  
der, was human. Blle, distil’d from a low Glass Cucurbit, by  
means of a Brass or Copper Alembic. From what has .heensaid it appears, that the Gall of Animals rnay be reckon’d  
among those Medicines which are of a detergent, anti-acid, and  
resolvent Nature. Hence it is alfo plain, that the stimulating  
and anti-acid Virtues of thofe Stones which are found in the  
Gall-bladders of Animals, are owing to the Bile, which is, in a  
particular manner, proved by the Stone call’d *Pedra del Perca.*But as the Blle soon becomes putrid, and consequently acrid, it  
is obvious, that it is safer to rise it as recent as possible, rather  
than when old: But itappears thet Blle, administer’d internally, in  
het Constitutions, and sucti Patients as are choleric, must always  
do Harm rather than Good, by what has already been said. If,  
then, the Gall of’Animals is uofeasorjably used, or exhibited in  
too large Doses, it is then supposed to exert an acrimonious  
Quality prejudicial to Health.; for which Reason every kind  
of Gall is by some rank’d among Poisons, because it excites  
bilious Vomitings and Syncopes. See *Forest. Oof. Mod. L.* 30.  
*Obsc* 7. *Schol.* But whether the Notion of Poisons is not ren-  
der’d more intricate than it otherwise might be, by thus ranking  
among them whatever produces fatal Effects, hy being inipru-  
dently used, I leave to others to judge. As for the other Pro-  
perties of Gall, *Pliny, L.* IS. 9. seems to be well enough ac-  
quainted with them. " Among all the other Substances, says  
"" he, common to Animais, the Gall produces the most impor-  
rant and salutary Effects; for it is possess’d of a heatiog,  
" pungent, inciding, extracting, and diseutient Quality. The  
" Gast ofthe smaller Animals is thought to he of a mote sub-  
tile Nature than that of the larger, and consequently better:  
". adapted to the Disorders of the Eyes. It is probable there is  
" fomeDifference between the Biles of different Animals; for,  
" first, the Bile of Fish is more acrid than that of Land-  
" animals. Secondly, among Land as well as Water-animals,  
" those which have the smallest Bodies, are most habituatedto  
" Motion, and feed upon, other Animais, have a more acrid  
"" Bile than fuch as are larger, and feed otherwise. Among .

Fish, the Preference is given to that of the Pike and Eel ;  
among Land-animals, to the Hawk and Serpent.” *Diofco.  
rides, L.* 2. *C.* I7. has observed, that the Biles of some Ani-  
mals are preferable to those of others in point of Acrimony., Bur  
*Paulus jEgineta* is so explicit and distincti upon this Subject,  
that, his Words deferve our Attention. See the Quotation be-  
fore from this Author. With regard to keeping Blle in theShops  
sor medicinal Purposes, we find the following Directions: The  
Gall is. to .be taken from Animals of a middle Age, which have  
neither suffer’d Hunger nor Thirst, and which have neither  
heen fatigued by too violent Exercise, nor been too much pro-  
voked. Having first tied the Vessels which give Ingress and  
Egrefs to rhe Blle, it is to be taken immediately from the Liver  
itself, and put for some time into tolling Water ; after which  
iris, to he taken our of the Water, dried in a proper Place, and  
close kept for Use. It is alfo sometimes hung upin a Chimney,

In order th dry, without being put into boiling Water. Bile is  
sometimes used recent and newly taken from Animals, especial-  
ly from Cocks, Partridges, Fish, and other Animals that may  
easily he obtain’d, and purchased at a cheap Rate. The Gall  
of Animals is, by the ***Chinese,*** applied to the worst and most  
detestable of Purposes, fince they secretly mix it up with other  
Ingredients, in order to protract the Cure of Wounds, and in-  
crease the.Misery ***CA*** their Patients. That .the Gall of Bulls  
produces a golden Colour, when applied to Objects, has been  
long ago observed by ***Pliny, L.*** II. ***Co 3J.*** There remains an-  
other medicinal Preparation of Ox-gall, to be met with in ***Le-  
nurfs Pharmacap .sJtducrf.***

Ox-gall, says he, contains a Volatile Salt, which renders It  
detersive, and proper to cleanse the Skin; but as it is Very’ Viscid,  
and will not keep without corrupting, a Preparation may the  
made Of it in the folio wing manner sse

Take Of Sugar-candy, two Ounces; of Roch-alum, half ah  
Ounce; of Borax, and Sandiver, or Salt os Glass, each  
three Drams. After having reduced all these Ingredients  
to a Powder, and put them into a Glass Vessel, add to  
. ' them four Pounds os Ox’s Gall, distil’d by a Sand-heat  
from a Glass or Earthen Cucurbit: Stop the Vessel well,  
and expose it.to the Heat of the Sun, or the Smoke of a  
Fire, for the Space of fifteen Days, shaking it now-and-  
- then ; after which filtrate the Liquor, and preserve it for  
the. . -

This Medicine renders the Skin delicate, smooth, and soft,  
**and** is esteem’d singularly efficacious in removing Freckles and  
Sun-burning. It is to be applied to the . Face at Night, going  
to Bed ; and is to be wash’d off next Morning with the Water  
- Of Lilies, or that of the Water-lily. This Medicine may also  
he laid on the Face in the Morning when one goes into the  
Fields, and continue till Night, that the Face may be the bet-  
**ter** guarded against the scorching Heat. -

- The Design of distilling the Ox-gall is, that it may preserve  
Itself the better from Corruption, and he the more agreeable  
**to** the Ladies Faces. Camphine is generally added to this Pre-  
paration ; but it is of littie or no Use, since it not only remains  
undissolved, but also gives it a disagreeable Smell. I have also  
retrench’d the plumous Alum, and the corrosive Sublimate, by  
siome used in this Medicine, because I judged them unsafe.

- The Salts which enter this Preparation of Ox's Gall, serve  
**to** render it more detersive and penetrating, that it may the  
more effectually remove the Blemishes of the Face.-

The Vestel into which this Preparation is put must not be  
entirely full, that the Liquor may be the more commodioufly  
shaken at proper Intervals.

A Preparation of Bile, for-cosmetic Purposes, is more easily  
obtain'd, by dissolving inspissated Bile with tartarated Spirit of  
Wine, and precipitating it -with Water of Frogs-fpawn, accord-  
ing to ***Hoffman*** in his Notes to ***Potcrius.***

BINARIUS. ' Λ μά δ᾽

Tho' the Word ***Binarius,*** among the antient ***Romans,*** implied  
Ito more than the Number Two; yet the ***Spagiric*** Philosophers  
affix'd an Idea to it, which I cannot Convey by any Words. I  
shall therefore represent their Sentiments Jo their own Terms.  
The ***Binarius*** then, according to them, was either ***Naturalis,*** or  
***contra Naturam.*** . The ***Natu/ralis Binarius*** was that which was  
produc'd by God, in consequence of the Division made between  
superior and inferior Objects, and.which, when wrapt up, as  
' it were, and included under the Bond of Unity, constitutes the

***Tornarius,*** when it is fit for returning into Unity. The ***Bina-  
rius contra Naturam*** is that Very Thing, which, being highly  
inimical not only to Nature, but more especially to God, of  
old endeavour’d to destroy all created Objects. This, according  
to them, is the Source of all Diseases, and of Death ; since it  
is not confin'd under any Bonds, but is rather the first Divorce,  
strongly endeavouring to break the Bond of Peace and Concord,  
not only among the supernatural, but also the natural Creatures  
Of the omnipotent God, who form’d all things. ***ThcaL Chyrn.  
Fol.*** I.

- By these he should mean the same which the ***Persians*** under-  
- stand by their ***Orrnoxd*** and ***Arirnaniusl***

BINSICA. ARabbinicalTerm, according to ***Helmontsuetipsu***ing mental Sickness, and particularly a distemper'd Imagination;  
or, ***v&Helnwnt,*** in his mystical Way-, -terms it, an Atrophy of rhe  
Organ of the Phantasy, such as, he says,, is excited by the Bite  
os a Tarantula, or a mad Dog, the Consequence of which is  
whet he calls ***Mors Iiinsica, "*** a Binsicai Death. "

‘ BINTAMBARU ***Tseylanensibus.*** Convolvulus maritimus  
***Zesianicus, Folio crasse cordes.ormi. Pes Caprae (a Folii Sirni-  
iudine) Lusitanis.*** Herman. Catal. Hort. Leyd.

- It -grows in ***Malabar,*** the Eland of ***Ceylon,*** and other Parts  
of the ***East-Indies.*** M. ***Herman*** supposes this Convolvulus, as  
well as others of that Species, to abound with a purgative Salt,  
which he infers both from the Acrimony of its milky Juice,  
which strikes the Tongue and Fauces, and from repeated Expe-  
riments ; for a Dram of the Resin. Of the Root, given in the

Yolk of an Egg, Or any Other convenient Emulsion,’ gently  
purged Water from Hydropical Patients: An Extract of the  
Root, prepared with. Spirit of Wine, had the same Effect.  
Hence he helieves, that the Opinion which the ***Portuguese*** and  
some ***Indians*** have conceiv’d of its diaphoretic Virtues, (which;  
perhaps, they .entertain’d froth its external'Resemblance to Sar-  
saparilla) is merely imaginary. The' the Root, be in the  
List of Cathartics, its Leaves are the common Food of Rabbets,  
Deer, and wild and rathe Goats. ***Rail Hist. Plant.***

BIOLYCHNIUM, βιολύχνιον; from βίος. Life, and  
λυχνίον, a Candle, or Lamp. The Lamp of Lise; A Term  
much us’d by some late Writers, and signifies the same as the  
***vital Flame,*** or the ***natural Heat c*** It signifies also a sort of  
Secret prepared of human Blood, mention'd hy ***Beguinus.  
Castellus. ' so ,***

BIOS, βίος, βιοτός, βμτῆ, generally signifies Life, and its  
Course ; but,sometimes means no moreThan ***Victus,*** Victuals,  
or Food necessary for Life. ***Castellus. ’ '***

... BIOTE, βιοτἡ. Life, in an affected Sense, signifies the  
Time of Continuance ‘ of Aliment in the Body, according to  
***Galen, Aph.ACi. Lilf.L. Epid. Sect.*** 5.- τὰ άο&ενἐστερα σιτία  
ὀλιγοχρονἵαν βιοτἐν’ἐχει, 4. weak Food has a short Life an-  
" nexed ;" that is, weak Aliment makes Persons short-liv'd ;  
or, in the Sense before, is hut of short Continuance in the  
Body.

BIOTHANATI, βιοθἀνάτοι, from βένς, Life, and θάνατος.  
Death. A Term applied to those who die a violent Death.  
***Castellus. . . :***

BIPINELLA, an Herb, the same aSPIMPINELLA, which  
Tee. - t . . . .... ἐν.... . -

BIPULA, a sort of Worm in ***Aristot. Hist. Animal,*** as  
***Gaxa*** interprets him. ***Castellus. - .***

BIRA. Beer. The-same as CERE VISIA, which sees  
***Castellus.***

, BIRSEN, an ***Arabian*** or ***Porsian*** Word, signifying an In-  
flammation or Impostume of the Breast; for ***Bir*** signifies a  
Breast, according to ***Avicenna*** and others. ’ ***Castellus.***

BISCOCTUS, δίεφθος, διπυριτης, twice dress’d, or that has  
twice felt the Fire; chiefly applied to Bread twice bak’d, or  
that is much bak'd. Biscuit.

BISEMATUM. The lightest, palest, and basest Lead.  
***Rulandus. -*** v-

BISERMAS. A Species of***Harminum.*** See HoRediNUMi  
BISLINGUA, ***Nippoglojsum, TJvularia,*** Offic. ***Hippo.,  
glossecm five Bisiingua,,-*** Park. Theat. 702. ***Hippogloffitm mas  
et smmina.*** Get. 76 I. Emac. 9o8. ***Boni facia five Bisiingua,***J. Β. I. 575. ***atippoglofsum, Biflingita, Bonis.aata,*** Chain 45.  
***Laurus Alexandrina, fructu pediculo insidente,*** C. B. Pin. 305.  
***Rusus angustisolius, fructu folio irniaseente,*** Tourn? Inst. '  
79. Elem. .Bot. 7o. Boerh. Ind. A. 2. 63. DOUBLE-  
TONGUE.

This Plant is commonly cultivated in the Gardens of Bo-  
tanists, and is said to be of a Vuinerary Quality. ***Dale Phar-  
rnacologia. ;***

BISMALVA. The same as ALTHAEA, which ***see.***

BISMUTHUM, Ossie.Charlt. Fossi 49. AldroV. Muf. Me-  
tal. I61. ***Bisinulum plumbum cinereum.*** Worm. I25. ***Mar~  
casita sive Bisimutum,*** Schred. 456. ***Marcasiia argentea,***Caesalp. ***Galana inanis. Germanes Blende,*** Woodw. Art.  
Tom. I. I82. ***Bis.muthurn,*** Idem, Tom. 2. Pi i. p. 28»  
MARCASITE OF SILVER, or TIN-GLASS. ***Dale.***

Bismuth is a Species os Tin, or a white and brittle metallic  
Substance, dispos'd in small Laminae, shining like Glass'; for  
. winch Reason it is call’d Tin-glass. It seems to be compos’d  
of a mineral Salt, a gross Sulphur, Mercury, a small Quantity  
os Arsenic, and a great deal of Earth. Mr. ***Poli,*** having pound-.  
ed separately one Part of Bismuth, and two of corrosive Subli-  
mate, and mix'd them in a Retort, to which a Receiver was  
adapted, extracted from .them, by Distillation, a sort os Gum  
or Butter, which partly adhered to the Neck of the Retort,  
and partly sell into the Receiver. This Butter he distill'd a  
second time, and besides- another Du tter yielded like the for-  
mer, there remain'd in the Bottom of the Retort a very fine  
.Powder, of the Colour os oriental Pearls, soft to the Touch,  
and somewhat glutinous, A third Process yielded him a Powder  
.still more fine and beautiful, in short, he repeated the Opera-  
tion 'till the Butter was entirely chang'd, partly into running  
‘Mercury, and partly into a pearl-colour'd Powder. This Pow-  
der may be used either in representing fine Pearls in Painting,  
or in giving their agreeable Colour to any Objects. ***Hisudre de  
ΓAcademic Royale, s’it'i,. »***

***Bismuth,*** or ***Tin-glasc,*** named ***Bis.mutlTutn, Oleins Plumbum  
eincreurn Agricolae, Marcasiia argentea,*** Quonind. is a metallic,  
fusible, but not ductile Substance ; very brittle and ‘ heavy, and  
distinguishable from Lead and Tin by its Colour, which is  
sometimes shining, like Silver, sometimes of ’a faint Purple,  
resembling the Regulus of Antimony, but consisting of broader  
Laminae, and staining the Fingers. It is prepared hy Artists,  
by being first torrefylu, and then melted into a Regulus.5 It is  
often found in Silver Mines ; and where-ever the Miners find

*Bifmush,* **they conclude they** shalfsind Silver ; abd hence they  
call it the Proof *of* Silver. The Mines of *Bismuth* are in *Bo-  
hemia* arid *Mifnia.-* Some pretend thet it may be extracted from  
Cobalt melted into a Regulus, by a particular Process ; but  
this is not certain.

*Bisenteth* seems to have been unknown both to-the *Greeks* and.’  
*Arabians ,* for the *Arabian Marcastie* was the *Lapis Pyrites.-*It is very feidom used in Physic, tho’ some prepare Flowers  
from it, which they say ate diaphoretic ; but most Physicians  
heve heen afraid to use jt inwardly, because of the arsenical  
Parts contain’d in it. The Magistery of *Bismuth* is prepared  
by dissolving the Metal in Spirit of *Nitre,* then precipitating it  
with a Solution of SeaSalt-in Water. This Precipitate, being.  
edulcorated by frequent Lotinns,, becomes a very white Powder,,  
much valued by the Ladies as a Cofmetic, and much used by  
Dealers in Hair, to-rmprove the Colour of it when dark or red.  
Pewterers mix it with Tin to harden it, and give it a- more  
shining Colour:- *Geoffrey.*

PROCESSES μροπ BrsMUyH.

**FLoREs BrsMUTHI** *: Fstviers of Bismutha ..*

Beat the *Bisenuih* into very sine Powder, and to four Ounces  
of it put half a' Pound of Nitre, also in fine Powder;  
put in that Mixture, by half a Spoonful at a time, into an  
earthen Body, perforated in the Side; when the Body is  
red-het, and the Operation is over, 'take-away the Aludels,  
and wipe off the Flowers with a Feather.

. These are very white, and used as an excellent Fucus, mix’d  
with Pomatum, or Rose-water butthey must not he too busy  
with it, who try it upon their Complexions; for the saline  
Parts of the Arsenic may do Mischief many ways. . But if  
the Nitre, and the Arsenical Salts, are wash’d away by frequent  
Solutions in warm Water, it will not only continue to he a  
good Cofmetic, but alfo may with Safety be given internally,  
and by some is reckon’d a good Diaphoretic. Yet, as **the**Materia Medica is large enough in its Supply for that intention,  
there is no Occasion to torture a Poison to make a Medicine of  
it. Its Dose is from ten Grains to two Scruples or a Dram.  
*Qyincsos Dispensatory, from fVilsenls Chymistry.*

*Lemersu* Method of making these Flowers is somewhat  
different. .

The Flowers of *Bismuth* are nothing but a Portion of Tin-  
flass, elevated in form of a sine Powder, by means of volatile  
alts. " .

Calcine the TIascmtioin.the manner Lead is commonly cab  
chain-; thenmixing it with an equid Quantity of Sal Am-  
moniac, put: your Mixture into an earthen Cucurbit capa-  
**ble of** hearing the Fire ; but two Thirds of the Cucurbit  
must at least be left empty. Adapt a Blind-head to it.  
Lute the Juncture carefully. Place-your Vessel in a fmall  
Grate-surnace, with an open Fine, but yet in such a  
manner, as that the Fire may breathe only thro’ the Re-  
gisters, for which Purpose the Top of the Furnace must  
he closed up with Bricks and Clay. The Cucurbit must  
also he sunk a. Third, or thereabouts, of its Height in the  
Furnace. Apply a small Fire at the Beginning; then  
augment it gradually,, till the Bottom of the Vessel be-  
, comes ted ; andthen continue it in the same Degree, till  
nothing ascends any longer,^ which may be known when  
the Head is become cold, and then the Sublimation is com-  
pleted. Then, allow the Vessels to cool, and unlute them.

' By this Process you will obtain Flowers, which may be  
dissolv’d in Water, and precipitated with Spirit of Sal Am-  
moniac,. or Oil of Tartar.

This Magistery, or Precipitate, may be applied in the same  
Uses with the following.

**MAGISTERY of BISMUTH.**

Magistery- of Bismuth is nothing but Bisinuth dissolv’d,  
and precipitated into a very white Powder.

Dissolve in a Matrafs one Ounce of the grass Powder os  
Bisinuth, with three Ounces of the Spirited Nitre , pout  
the Dissolution, into a'dean earthen Vestel, and add to it  
five or six Pounds of Spring-water, in which half ari-Ounce  
**-of** Sea Salt has been previoufly dissolv’d ; upon which **a  
white** Powder will he precipitated to the Bottom.- Pour  
**off the** Water by inclination, and wash the Magistery  
several times ; then dry it in a Shade. This ische **Cos-**metic which the *French* call *Blanc-di-Espagne,* or-the Cele-  
brated *white Spanish Cofmetic,* which is esteemed so sine a  
Cleanser and Whitener of the Face. The Methed- of  
using it is, either to mix it with Pomatum, or with Oll  
of Lilies. **Wig-makers also use jt, in order to beautify**their **Hair.**

REMARKS.

A pretty large Matrass ought to he employed in dissolving the  
Birmuth, in order to give room-for a violent Effervescence,,  
which is produc’d as soon as the Spirit of Nitre is pour’d  
upon that Mineral. The Operator must guard, as much as he  
possibly can, against admitting the Steam either into his  
Nostrils or Mouth, hecaufe it is highly prejudicial to the  
Breast.

This quick and violent Effervesoertce procceds from this ; that  
the Pores of the *Bismuth* heing pretty large, the Acid im-  
mediately makes its Way into them, and violently removes  
every thing that opposes its Motion. On this Occasion it  
also happens, that the Matrass is so heated, that one cannot  
hold a Hand upon it ; because the Points of the Dissolvent  
strike with a great deal of Force upon thesolid *Bismuth,* by  
which a Heat is produc’d, resembling that which results from  
the Friction of two solid Bodies upon each other for a con-  
siderable time. Besides, the Quantity of fiery Particles con-  
tain'd in the Spirit, of Nitre, may contributo very consi-  
derably to the Production of this Heat:

If the Solution is turbid, on.accourjt of any Impurities con-  
tam’d in the *Piscnuth,* a double Quantity of Water being  
mix’d with it, it must be filtrated; for; if an Attempt  
should be made to filtrate it without- Water, rt would coa-  
gulate in the Form of a Salt, and, consequently, become in-  
capable of passing thro’ the Filtre. This Coagulation proceeds  
from this, that the acid Spirits of the Nitre, which are  
sheath’d up in the Particles of the *Bifmutb,* finding too stnall  
a Quantity of Liquor to float and disperse themselves in, unite  
together in the Form of Crystals, when the Solution becomes  
cold.

The Impurity which generally stoatsmpon the Solution of *Bise  
muth,* is a pinguious and bituminous Substance, which is not  
dissolvable by the Spirit of Nitre.

This Magistery may be made, by pouring a large Quantity of  
Spring-water without Salt into the Solution ; but it is more  
quickly done, and the Precipitation more exactiy made, by  
the Addition of the Salt, which agitates and breaks some of  
those acid Parts, which the Water alone was not powerful  
enough to subdue and divide.. A Difficulty here arifes, and  
that is, why common Water alone precipitates the *Bismuth,*Lead, or Antimony, which an Acid has previoufly disiolv’d,  
but can neither precipitate Gold, Silver, nor Mercury,  
without the Assistance of some Salt, or some other proper  
Substance. I suppose this Phenomenon is produc’d, because  
the former Substances heving large Pores, the Acids are not  
so strongly lock’d up in them, but that they may be distodg’d -  
by Water; whereas Gold, Silver, and Mercury, having  
Pores comparatively very small and minute, keep the Acid  
so strongly lock’d up, that it cannot he separated by the toe  
languid Agitation of the Water alone, which, to produce  
this Effeci, requires the Addition of some other Substance,  
capable of giving stronger and more violent Shocks.

The Augmentation happening to *sue Bifmutb,* when reduc’d  
to a Magistery, proceeds from some Part of the Spirit of  
Nitre being retain’d in it, notwithstanding the Precipita-  
tion and Lotion. If we incline to have it exceedingly  
white, ’tis not only necessary, thet the Water us’d in-wash..  
ing it should be very pure and transparent, but, after it has  
been thoroughly dried in a Shade, it must be carefully kept  
in a Glass-phial, well stopp’d; for the Air renders it of a dark  
and brownish Colour..

As for the Method of usingthis Magistery, a Dram of it is  
ordinarily mix’ll with four Ounces of the Lily or Bean-flower-  
Wafer,. or with an Ounce of Pomatum. This Medicine-is  
good for the Itch, because it destroys the Acids, or Salts,  
which foment and nourish that Disorder; But this Magistery  
is rarely used in any other Shape than that of a Costnetict  
It is the Paint most generally used by Women who incline  
to improve their Complexions, because it is-more easily laid  
0», and adheres more firmly, than other ]?ainte. But as **the**Marcasite, from which it is drawn, is of the metallic Kind,  
the Heat of the Skin reunites,, revivifies, and renders brown,  
its Particles, which ow’d their Whiteness only to their Di-  
vision ; for which Reason, thofe whe make frequent Use of  
this Paint, heve generally a llvid Countenance, and the Skin  
of it more rough and unmpolish’d, than it was before they  
began to use is.

If, for the sake of Curiosity, we filtrate the Water used in  
precipitating the Magistery of *Bisenuih,* and, with a new  
Pen, write any thing with it on white Paper, the Letters  
will not at all appear ; hut if, after they are thoroughly dry,  
we rub them gently with a little Cotton, dipt in a Decoction  
**of the** Scoriae os Antimony, they become very biack.  
*Emery Cours de Chymie. ' ,*

**BISON.**

This is a Sort of wild Ox in the *Indies.* His Forehead is  
large, his Horns crooked, sharp at the Points, black and shine-

ing"; hisiEyes are large, 'fierce, terrible, and. flaming. his  
Tongue is to rough, that the Part lick’d with it is excoriated,  
and Blood is drawn from it. - in bis Tail there is a large Quan-  
tity of Hairs, which finest like Musk. This Animal frequents  
the Woods, and is of so savage and cruel a Nature, that ’tis  
dangerous to come in his Way. The Horns of this Animal,  
when reduced to a Powder, and taken internally, are esteemed  
sudorific, and proper for resisting Poisons. The Dose of this  
Powder is from half a Scruple to one Dram. si..

The Excrements of this Animal are possessed of a highly  
resolvent Quality. *Lemery des Drogues. \_*

BISTACIUM, for PisTAcIUM, or PisTaciA, which  
see- ......

. BISTORTA, Offic. *Bifiorta Serpentina,* Chab. 507. *Bise  
torta maser.* Ger. 322. Emac. 399. Raii Hist. I. L86. Synop.  
59. *Bijiarta maser vulgaris.* Park. 39I. *Bisearta maser, rugo-  
jisribus foliis,* J. B. 3. 538. Dill. Gat. S9. *Lijlorta radice  
minus intorta,* C. B. I92. Hist. Oxon: 2. 585. Iourn. Inst.  
511. Boerh. Ind. A. 2.86. Buxb. 39. BISTORT or SNAKE-  
WEED. , -

The Roots of the great Bistort are about as thick as the  
little Finger, brown on the Outside, and reddish within;

, somewhat curled and twisted, with many small Fibres growing  
out on every Side. The Leaves resemble somewhat the Leaves  
of the common Dock, but are of a firmer Substance, of a  
bluish-green Colour above, and ash-colouril underneath,  
much narrower at the End next-the Root, having only.a nar-  
row Film tunning on each Side the Stalk. The Flowers  
grow in Spikes like Ears of Corn, of a pale-red. Colour, made  
Up of several final!, imperfect, staminous Flowers, in winch  
-grow black triangular Seeds ; they stand on'Stalks .aFoot or a  
F oot and a half high, which have a Leaf or two at the joints,  
encompassing them round next theStalfc, and growing nar-  
rower, and sharp-pointed at the End. - -

Bistort grows in several moist Meadows, the’ it is not very'  
common about *London.* It is to be met with in *Battersea*Meadow, near the *Thames* Side, flowering in *Mays*

The Roots of Bistort, which are the only Part that is used, '  
are drying and binding, of Service in all kind.of Fluxes, and  
Hemorrhages, either from the Bowels, or any other Tart ;  
they help the incontinence of Urine, and the making bloody  
Water. They are also Alexipharmic, and good in pestilen-  
tial Fevers ; they relist Poison, and the Bites and Stings of  
venomous Creatures. *Millers.Set. Osts. .. .- - .*

The Root is mostly used in the Shops, and is of a healing,  
astringent Quality, especially 'in Dysenteries; bloody Fluxes,  
Dyfenteric Exulcerations of the Intestines, and Vomitings of  
Blood. It cutes an excessive Flux of the MenIes. and Hemor-  
rhoids, and removes violent Vomitings. It quenches : Thirst,  
for which Reason it is by *Paracelsus* called *Anafacra,,*by.which  
he perhaps meant *'Anasarca.* The principal way of .using  
it is to mix it with other proper Herbs for,the Cure, of'the  
Dropsy. *L. Thurncijser, de Aquis Miner: et Aeletall. L.* 6.  
*. C. (yj.* affirms, that it kills Worms in the Intestines. It is also  
used in .Defluxions, and Pains of the Head, malignant Fevers,  
Small-pox, Meastes, and the Plague. It proves a Check to the  
too violent Ebullition of the Blood, and prevents the over-  
heating of-its more spirituous Parts. It prevents Miscarriages,  
and cures Wounds and Ruptures. And when any Vessel in  
, the Abdomen is broken, it is often made an Ingredient in  
vulnerary Drinks, prepar’d as a Remedy. . The Root  
powder’d, and thrown into recent Wounds, stops the Effusion  
of Blood, and cures them. A Decoction of the Root also,  
with Wine and Vinegar, stops immediately the niost violent  
Effusions of Blood from Wounds, if washed with it. Some  
take two Parts of the Root reduc’d to Powder, and one Part  
of Quick-lime, and mix them with Wine and Vinegar, and,  
after having evaporated the Humidity, ufe the Powder which  
remains in the Vessel for curing the Cancer. The Root mix’d  
with forne Water proper for Disorders of the. Mouth cures  
Tooth-achs, fixes loofe Teeth, and hardens the; Gums, by  
preventing a Fluxion ; of, Humours mi. them. 1 Some distil- a  
Water from the Root, Leaves, and Flowers. Others prepare  
a. Syrup from the Root, which they call *Syrupus Colubrinus.*Both these Medicines are accounted excellent against the Plague,  
Dysentery, Fluxes, Vomitings of Blood, immoderate Dis-  
charges of the Menfes, and Vomitings. .The Water cleanses  
and heals all old Ulcers and Cancers, if they are.washed with  
.It, and some of the Powder of the Root is sprinkled upon  
them. It is confidently affirmed, thet it banishes all Insects  
from a House. *Barihol. Zorn Botanalogi a.*

BITHNIMALCA "and GASTERANAX are Words  
.coined by *Dolaeus,* to signify a peculiar active Principle refide-  
ing in the Stomach, and presiding over the several Functions  
of Chvlification, Distribution, and Secretion. .

BITHYNICI *Tonseris sEonplastrum.* The *Biihynean Bat-  
vers* Pleister for splenetic and hydropical People. It is describ’d  
by *Aetius, Tetrab. Q.Scrm.* 2. *cape* 22.

BITHYNOS, Βιδυνὀς, the Name of a Plainer de-  
scribed by *Galen, L.* 9. *de comp. Mede Sec. Lacs sap.* 3I. also

**a Troche in the same Author,** *Lila 5. de comp. Mast, per Cequi  
caprili* **' X;--\* .. .**

BITI. The Name of a tall and evergreen Tree growing in  
*Malabar,* and other Parts of the *East-Indies .,* all the Use it is  
known to heve in Medicine .is, that an Oil is prepared of the  
Root, which cures an Alopecia. *Ray.*

BITRINATL "Glased. *Plumandus.*

BITTERN. At the Salt-wothe, where Salt is made from  
the Sea Water, that Liquor which runs from the common Salt,  
when taken out and put into proper Vesseis, is called Bittern:

\_ Or it is the Liquor which remains after the Crystallization  
of the common Salt. *Phil. Transact.* See Sal **CATHAR-  
TICUM, AMARUM. ... . ; .**

BITUMEN, Ossic. *Bitumen vulgare Pisseasphalturn,* Mont;  
Exo.t: 12. Gsbal. 2o. *Pisseaspkaltos natiorum,* Sehrod. 4. 20g;  
Diosc. *Piossasphaleurn,* Worm. Mus. 30. Charlt. Foss. I4. .Si-  
*tumen Fossele,* Aldrov. Mus. Metall. uflo. COMMON FOS-  
SILE PITCH.

The *Pijsasphaltos* is produced'in *Apollonia* near *Epidarnnpri*and is carried down the *Ceraunian* Mountains by the Current  
of a River, , and thrown , upon the Shores, where it concretes  
into Malles, ;and sinells like Pitch mixed with Brimstone.  
.Diascor. *lib.* I. *cap.* too.

The *Pijscafphalium* of *Dioscorides,* and of the Shops, or  
mineral Pitch, is a black or red kind of *Bitumen,* of a fra-  
grant and not unpleafant bituminous Smell, viscid,, or of a  
middle Consistence between *Petroleum,* and a solid *Bitumen,*not unlike the common , Pitch, fusible by Fire, concrescible  
by Cold, and easily inflammable: It is compounded of two  
*Greek* Words, which. signify Pitch .and *Bitumen,* and the  
Compound might be rendered a bituminous Pitch, or pitchy  
*Bitumen* ; the Reason of which Name is not, that it consists of  
an artificial Mixture of these two Substances, but it smells like  
such, a Mixture.. It distils from Rocks, or springs from the  
Earth in several Countries. In *Italy* they use that which is '  
found in the *Campania di Roma,* about fiedy Miles from the  
City, near a little Town called *Catho.* It oufes through the  
Crannies of Rocks in the Summer-time, of the Consistence of  
Honey, of a black Colour, and penetrating Smell. There is  
likewise a plentiful Spring of this *Bitumen* in *Auvergne* in  
*France,* which is soft and black like Pitch, and of’ a bitumi-  
nous Smell.. If. it be kept a great while, it grows hard, re:.  
raining still something of its fatty Consistence, and never grows  
*so dry* or hard as the solid *Bitumens.*

Fresh *Pisseasphalturn* is digestive, maturating, and resolvent.  
It is ufed in ripening Buboes, resolving Tumors, difcussing  
sciatic Pains,, and to strengthen luxated Parts after they have  
-heen reduced. A Mixture of this, and stimy or muddy Clay,  
is called *Maltha,* and wed used as Morter in building the  
Walls of *Babylon,,* according *to Vitruvius. G eastray.*

The *Asphaltus,* of which an Account. is .given under the  
Word, is a Species of *Bitumen,* of which DI. *Shaw* in his  
Travels gives the following Relation; this Author speaking of  
*.the Dead Sea,* fays thus. .....

I was informed, that the *Bitumen,* for which the Lake hath  
.been always remarkable, is raised at certain times from the'Bot-  
tom in largeHemifpheres; which, as soon as they touch the Sur-  
face, and fo are sited upon by the external Air, burst St once  
with a great Smoak and Noise, like the Pulvis Fulminans of  
the Chymists, and disperse. themselves round about in a thou-  
sand Pieces. But this happens only near.the Shore; for in  
greater Depths, the Eruptions are supposed to discover them-  
selves only in fuch Columns of Smoke, as are now-and-then'  
.observed to arise from the Lake. And perhaps to such Erup.  
tions as these ws may. attribute that Variety of Pits and Hol-  
lows which are sound in the Neighbourhood of this Lake, and  
compared very justly, by Mr. *Maundrell,* to those Pisces in  
*. England,* where there have been formerly Lime-kiins. The  
*Bitumen,* in all Probability, is accompanied from' the Bottom  
with .Sulphur, inasmuch as both of them are found promise  
cuousty upon the Wash of the Shore, fine latter is exactly  
the fame with common native Sulphur; the former is friable,  
heavier than Water, yielding upon Friction, or by being set  
on Fire, a fetid Smell. Neither doth it appear to be, as *Di-  
joseorides* describes -his*Asphaltus,* of a purplish Colour; but is  
as black as Jet, and exactly of the.same shining Appearance:  
' BIVALVA, BIVALVULA. Bivalve. A Term in Bo-  
tany, apply’d to the Pods or Husks of Plants, which open  
.lengthwife tio two Parts, llke the Shell of a Muscle. *Miller’e  
Dict. : .......*

BIVENTER, διγαστρικὸς, double-belly id. The fame as

DIGASTRICUS, which fee.

BIXA OVIEDI. A Name for theACHIOTL, which fee:

ΒΕΑΒΕ, βλάβη. Hurt, Injury, Prejudice. Henco βλαβερας, \*  
noxious, injurious. . . . ; .

BLACCfAE. A Name in *Rhazcs* sor the Meastes.

BLACHMAL. *\ Johnsen* fays, that this imports a Matter  
consisting of various Metals melted together, and cast into  
Sulphur: ...